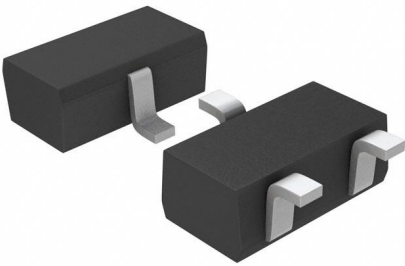


UNR911TJ0L Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	UNR911TJ0L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	UNR911TJ0L
Description	TRANS PREBIAS PNP 50V SSMINI3
Detailed Description	Pre-Biased Bipolar Transistor (BJT) PNP - Pre-Biased 50 V 100 mA 80 MHz 125 mW Surface Mount SSM ini3-F1



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

UNR911TJ0L

Series:

-

Transistor Type:

PNP - Pre-Biased

Voltage - Collector Emitter Breakdown (Max):

50 V

Resistor - Emitter Base (R2):

47 kOhms

Vce Saturation (Max) @ Ib, Ic:

250mV @ 300µA, 10mA

Frequency - Transition:

80 MHz

Mounting Type:

Surface Mount

Supplier Device Package:

SSMini3-F1

Manufacturer:

Panasonic Electronic Components

Product Status:

Obsolete

Current - Collector (Ic) (Max):

100 mA

Resistor - Base (R1):

22 kOhms

DC Current Gain (hFE) (Min) @ Ic, Vce:

80 @ 5mA, 10V

Current - Collector Cutoff (Max):

500nA

Power - Max:

125 mW

Package / Case:

SC-89, SOT-490

Base Product Number:

UNR911

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.21.0095

ECCN:

EAR99

UNR911xJ Series (UN911xJ Series)

Silicon PNP epitaxial planar type

For digital circuits

■ Features

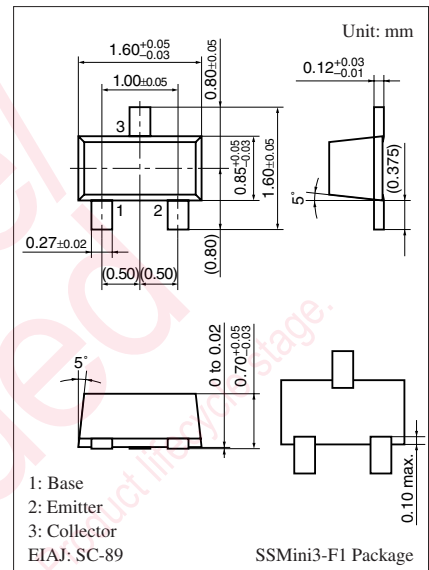
- Costs can be reduced through downsizing of the equipment and reduction of the number of parts.
- SS-Mini type package, allowing automatic insertion through tape packing.

■ Resistance by Part Number

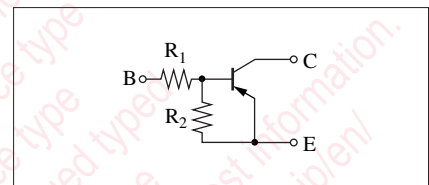
	Marking Symbol	(R ₁)	(R ₂)
• UNR9110J (UN9110J)	6L	47 kΩ	—
• UNR9111J (UN9111J)	6A	10 kΩ	10 kΩ
• UNR9112J (UN9112J)	6B	22 kΩ	22 kΩ
• UNR9113J (UN9113J)	6C	47 kΩ	47 kΩ
• UNR9114J (UN9114J)	6D	10 kΩ	47 kΩ
• UNR9115J (UN9115J)	6E	10 kΩ	—
• UNR9116J (UN9116J)	6F	4.7 kΩ	—
• UNR9117J (UN9117J)	6H	22 kΩ	—
• UNR9118J (UN9118J)	6I	0.51 kΩ	5.1 kΩ
• UNR9119J (UN9119J)	6K	1 kΩ	10 kΩ
• UNR911AJ	6X	100 kΩ	100 kΩ
• UNR911BJ	6Y	100 kΩ	—
• UNR911CJ	6Z	—	47 kΩ
• UNR911DJ (UN911DJ)	6M	47 kΩ	10 kΩ
• UNR911EJ (UN911EJ)	6N	47 kΩ	22 kΩ
• UNR911FJ (UN911FJ)	6O	4.7 kΩ	10 kΩ
• UNR911HJ (UN911HJ)	6P	2.2 kΩ	10 kΩ
• UNR911LJ (UN911LJ)	6Q	4.7 kΩ	4.7 kΩ
• UNR911MJ	EI	2.2 kΩ	47 kΩ
• UNR911NJ	EW	4.7 kΩ	47 kΩ
• UNR911TJ (UN911TJ)	EY	22 kΩ	47 kΩ
• UNR911VJ	FC	2.2 kΩ	2.2 kΩ

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-50	V
Collector-emitter voltage (Base open)	V _{CEO}	-50	V
Collector current	I _C	-100	mA
Total power dissipation	P _T	125	mW
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +125	°C



Internal Connection



(Note) The part numbers in the parenthesis show conventional part number.

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

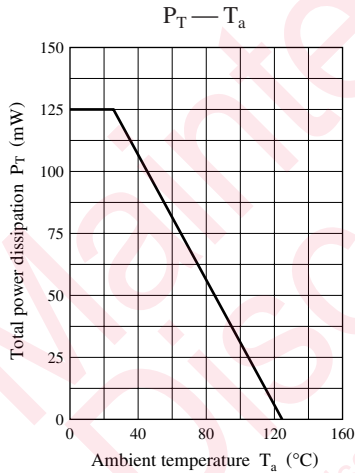
Parameter	Symbol	Conditions	Min	Typ	Max	Unit				
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10 \mu\text{A}, I_E = 0$	-50			V				
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -2 \text{mA}, I_B = 0$	-50			V				
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -50 \text{V}, I_E = 0$			-0.1	μA				
Collector-base cutoff current (Emitter open)	I_{CEO}	$V_{CE} = -50 \text{V}, I_B = 0$			-0.5	μA				
Emitter-base cutoff current (Collector open)	UNR9115J/9116J/9117J/911BJ	I_{EBO}				-0.01				
	UNR9110J/9113J/911AJ					-0.1				
	UNR9112J/9114J/911DJ/ 911EJ/911MJ/911NJ/911TJ					-0.2				
	UNR9111J					-0.5				
	UNR911FJ/911HJ					-1.0				
	UNR9119J					-1.5				
	UNR9118J/9111CJ/911LJ/911VJ					-2.0				
Forward current transfer ratio	UNR911VJ	h_{FE}	$V_{CE} = -10 \text{V}, I_C = -5 \text{mA}$	6		20	—			
	UNR9118J/911LJ			20						
	UNR9119J/911DJ/911FJ/911HJ			30						
	UNR9111J			35						
	UNR9112J/911EJ			60						
	UNR9113J/9114J/911AJ/ 911CJ/911MJ			80						
	UNR911NJ/911TJ			80		400				
	UNR9110J/9115J/9116J/ 9117J/911BJ			160		460				
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10 \text{mA}, I_B = -0.3 \text{mA}$				-0.25	V			
								$I_C = -10 \text{mA}, I_B = -1.5 \text{mA}$		
Output voltage high-level	V_{OH}	$V_{CC} = -5 \text{V}, V_B = -0.5 \text{V}, R_L = 1 \text{k}\Omega$	-4.9			V				
Output voltage low-level	V_{OL}	$V_{CC} = -5 \text{V}, V_B = -2.5 \text{V}, R_L = 1 \text{k}\Omega$				-0.2	V			
								UNR9113J/911BJ	$V_{CC} = -5 \text{V}, V_B = -3.5 \text{V}, R_L = 1 \text{k}\Omega$	
								UNR911DJ	$V_{CC} = -5 \text{V}, V_B = -10 \text{V}, R_L = 1 \text{k}\Omega$	
								UNR911EJ	$V_{CC} = -5 \text{V}, V_B = -6 \text{V}, R_L = 1 \text{k}\Omega$	
								UNR911AJ	$V_{CC} = -5 \text{V}, V_B = -5 \text{V}, R_L = 1 \text{k}\Omega$	
Transition frequency	f_T	$V_{CB} = -10 \text{V}, I_E = 1 \text{mA}, f = 200 \text{MHz}$					80			
							UNR9113J	150		
							UNR911AJ	80		
							UNR911CJ	150		
Input resistance	R_1						-30%			
							UNR9118J	0.51	+30%	k Ω
							UNR9119J	1.0		
							UNR911HJ/911MJ/911VJ	2.2		
							UNR9116J/911FJ/911LJ/911NJ	4.7		
							UNR9111J/9114J/9115J	10		
							UNR9112J/9117J/911TJ	22		
							UNR9110J/9113J/911DJ/911EJ	47		
UNR911AJ/911BJ	100									

■ Electrical Characteristics (continued) $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

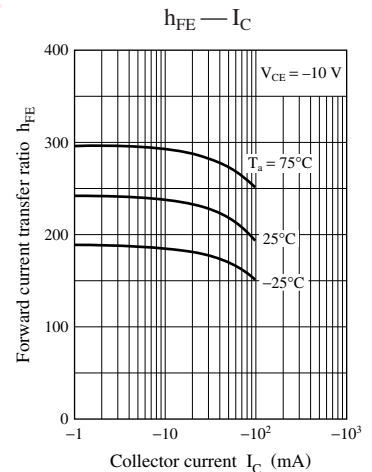
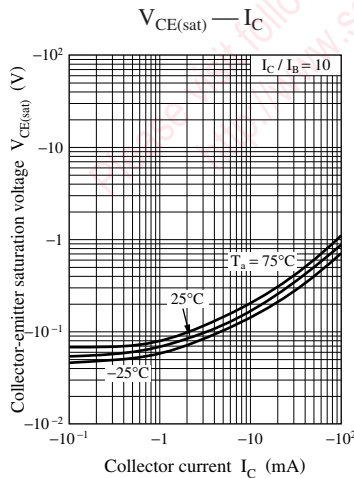
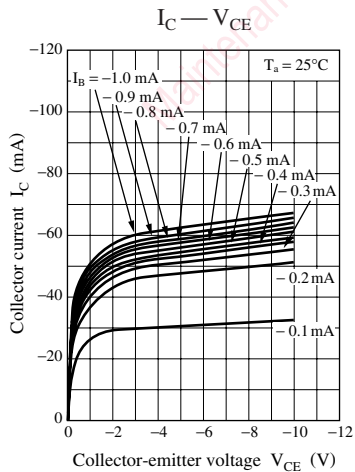
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Emitter-base resistance	UNR911CJ	R_2		-30%	47	+30%	k Ω
Resistance ratio	UNR911MJ	R_1/R_2			0.047		—
	UNR911NJ				0.1		
	UNR9118J/9119J			0.08	0.10	0.12	
	UNR9114J			0.17	0.21	0.25	
	UNR911HJ			0.17	0.22	0.27	
	UNR911TJ				0.47		
	UNR911FJ			0.37	0.47	0.57	
	UNR911AJ/911VJ				1.0		
	UNR9111J/9112J/9113J/911LJ			0.8	1.0	1.2	
	UNR911EJ			1.70	2.14	2.60	
	UNR911DJ			3.7	4.7	5.7	

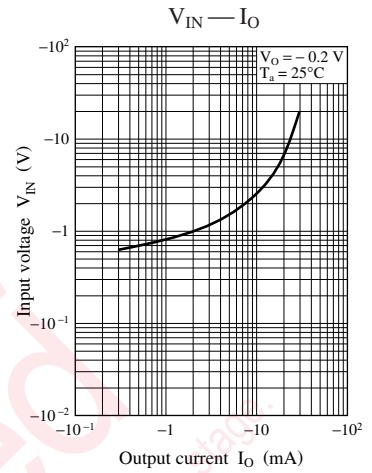
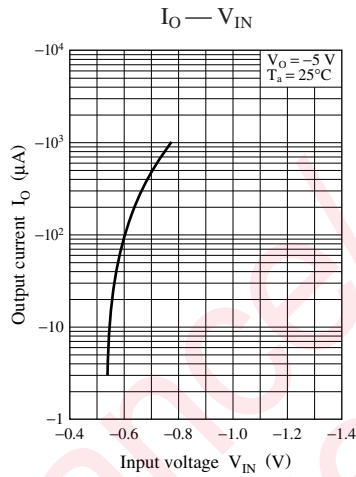
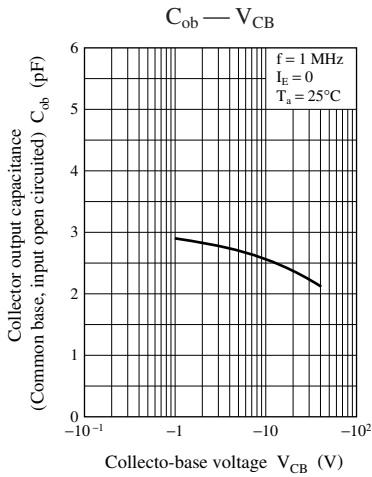
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

Common characteristics chart

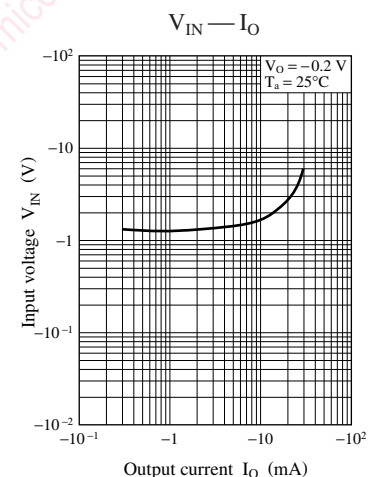
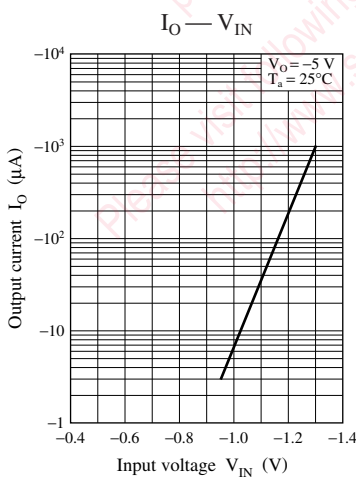
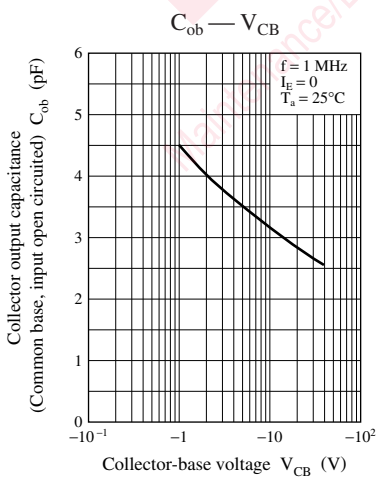
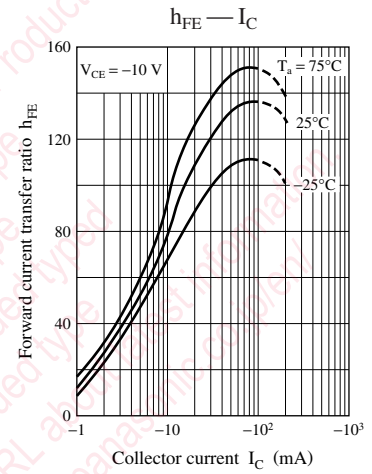
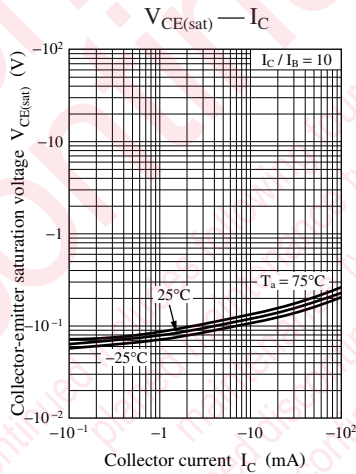
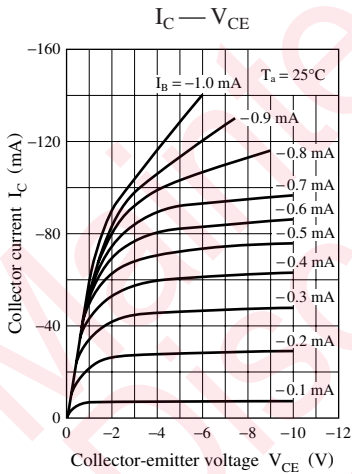


Characteristics charts of UNR9110J

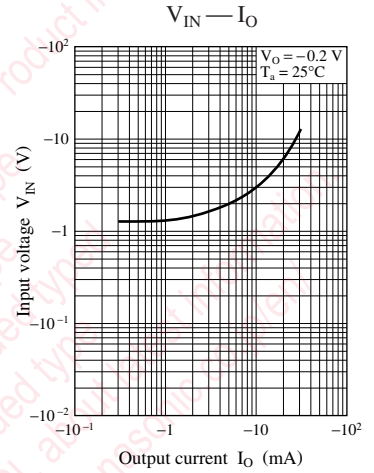
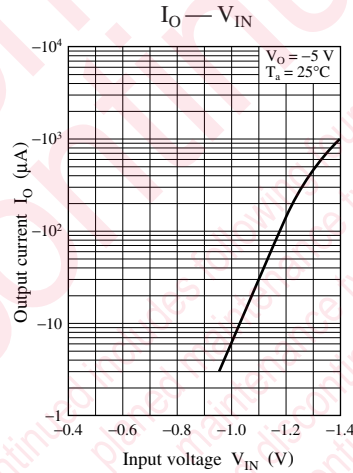
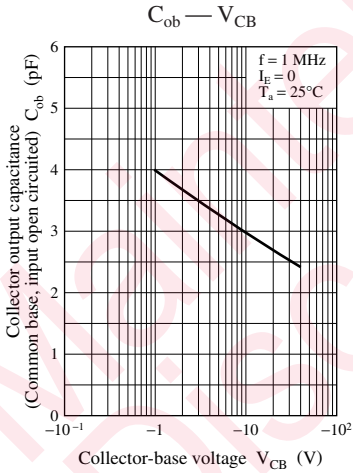
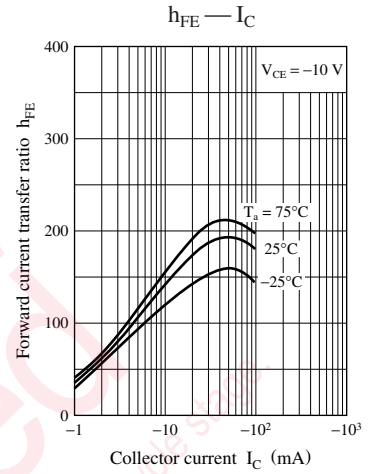
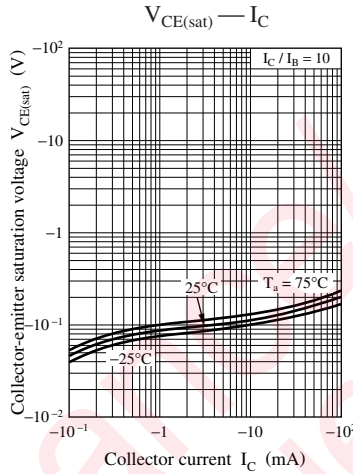
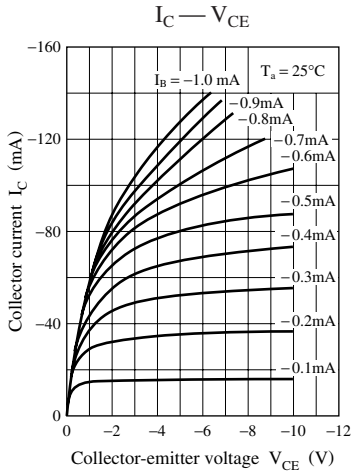




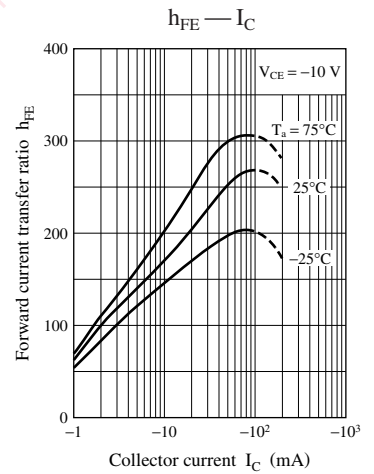
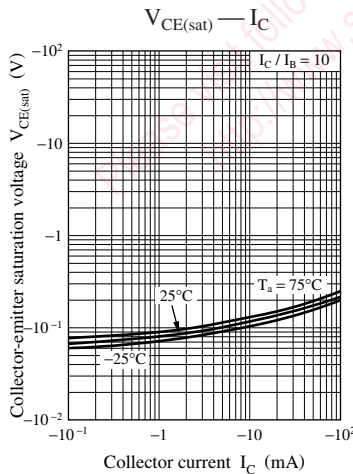
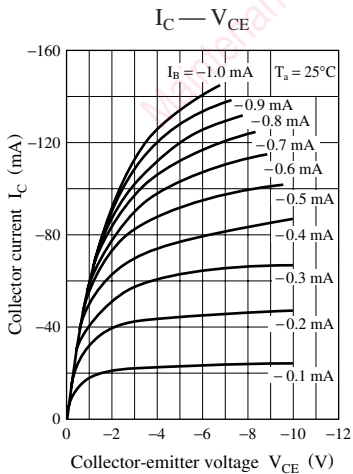
Characteristics charts of UNR9111J

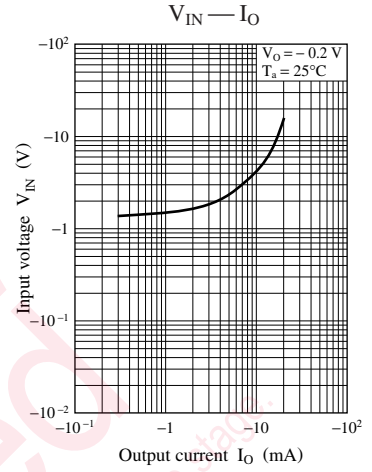
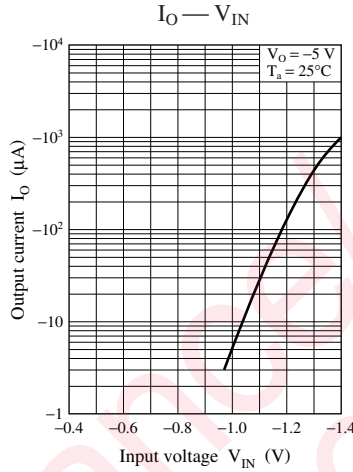
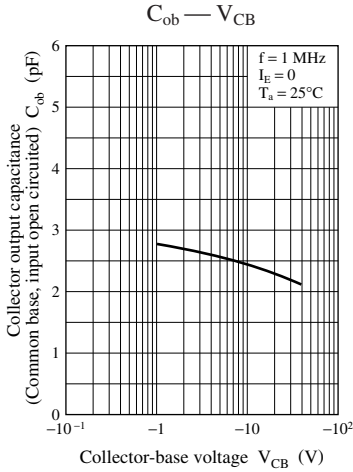


Characteristics charts of UNR9112J

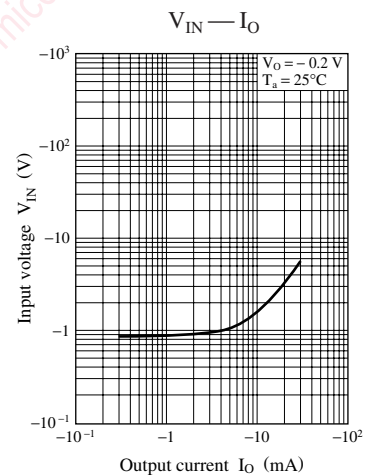
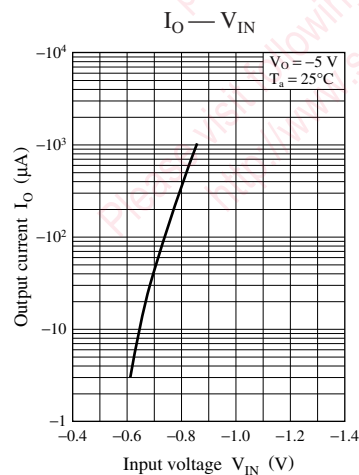
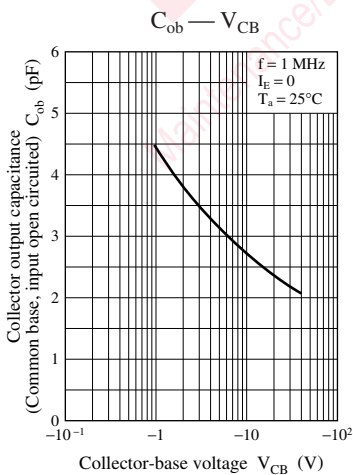
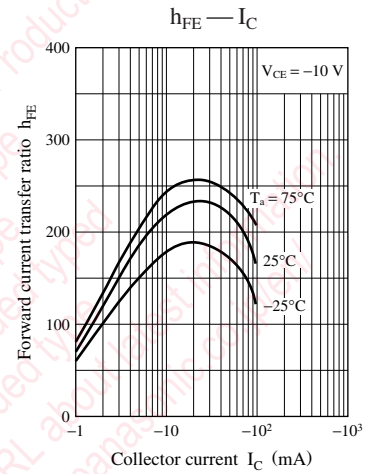
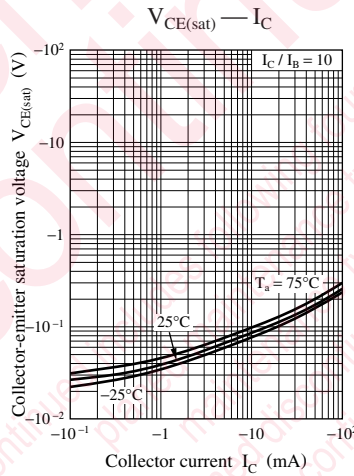
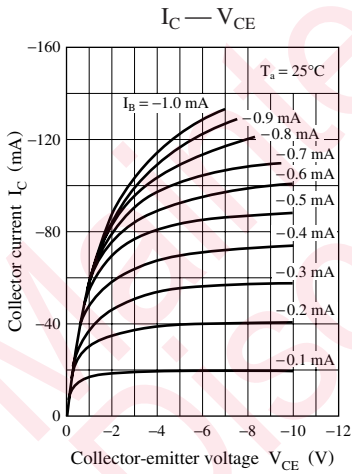


Characteristics charts of UNR9113J

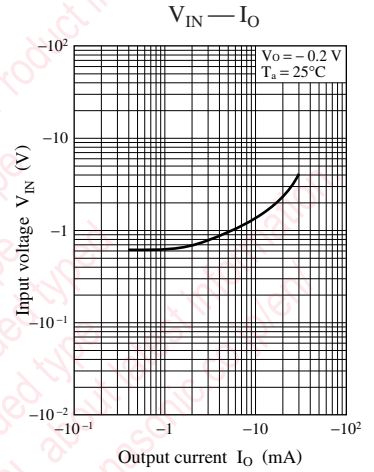
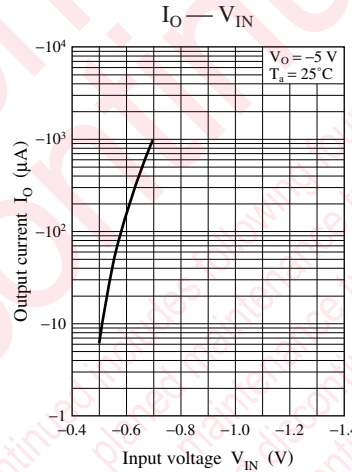
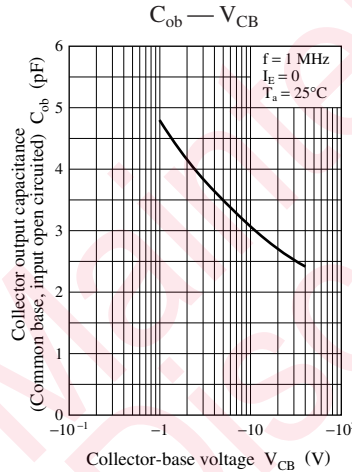
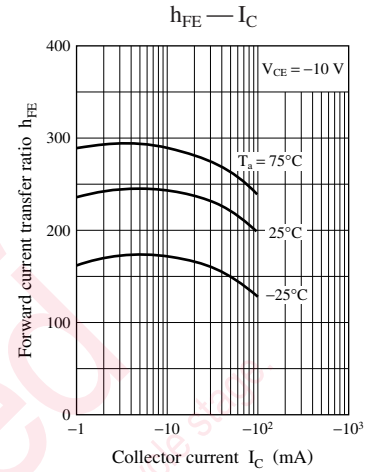
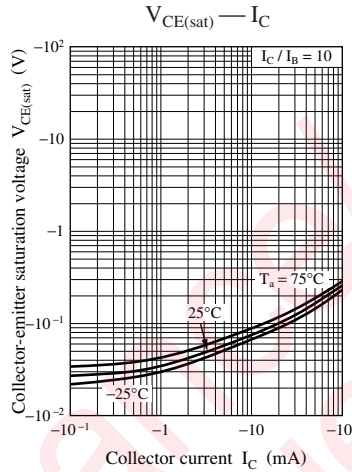
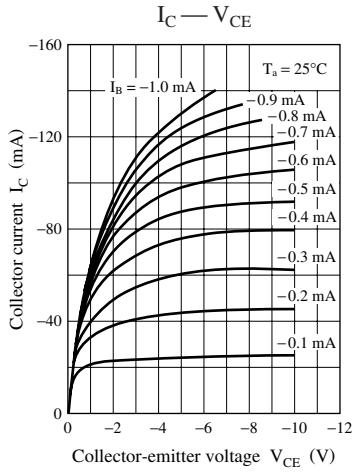




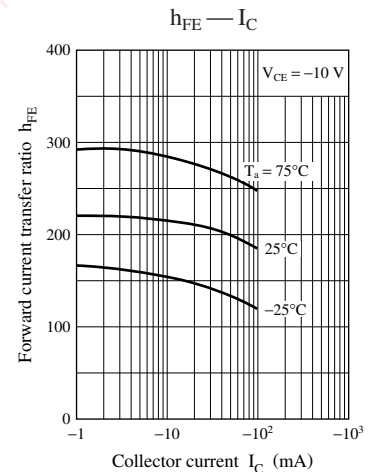
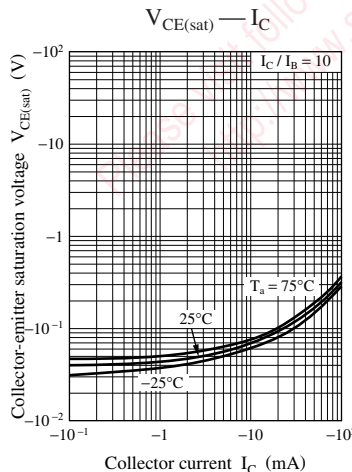
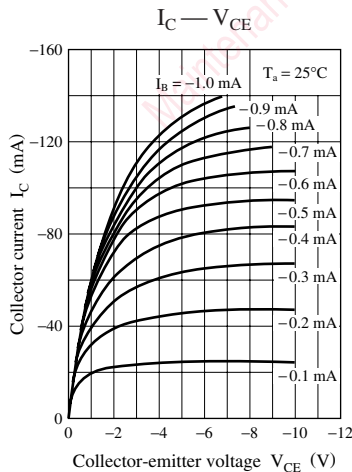
Characteristics charts of UNR9114J

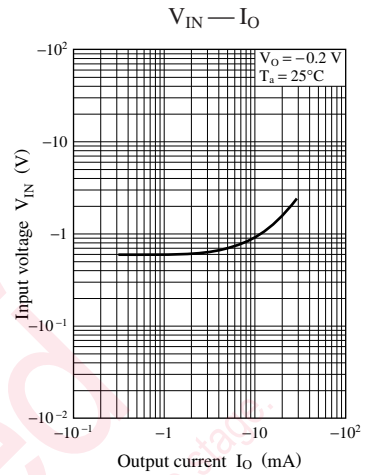
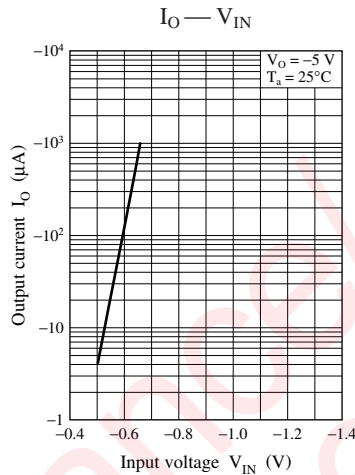
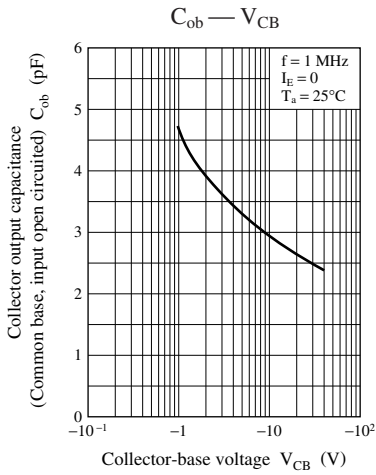


Characteristics charts of UNR9115J

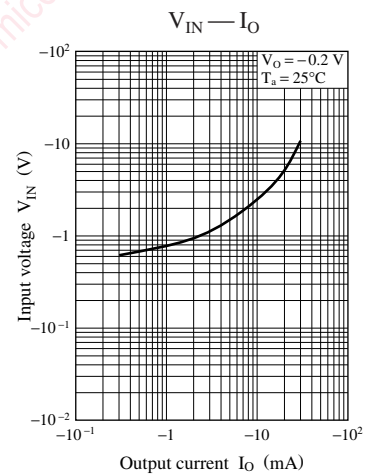
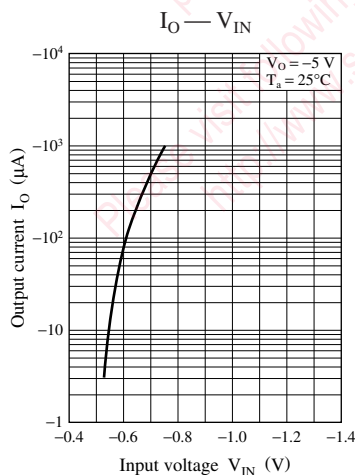
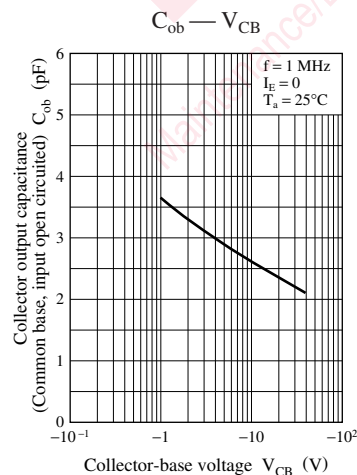
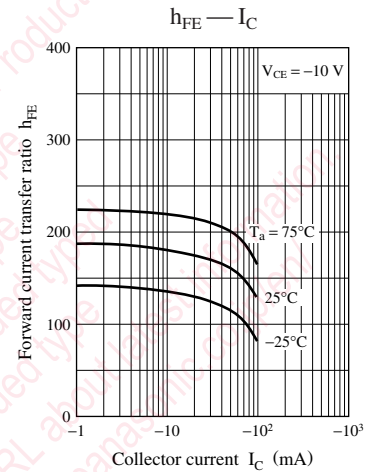
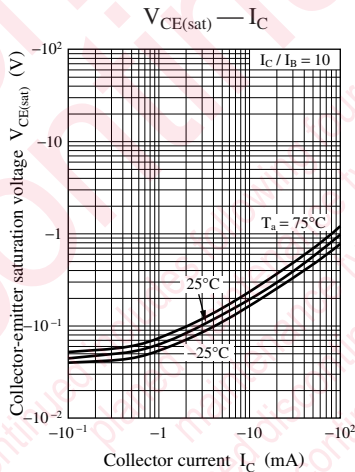
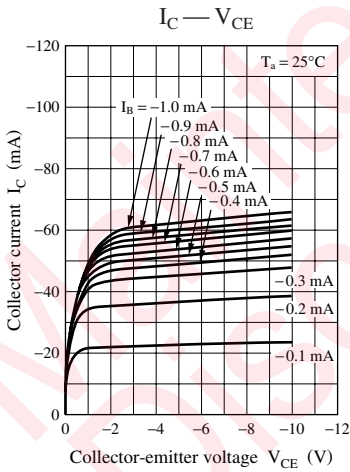


Characteristics charts of UNR9116J

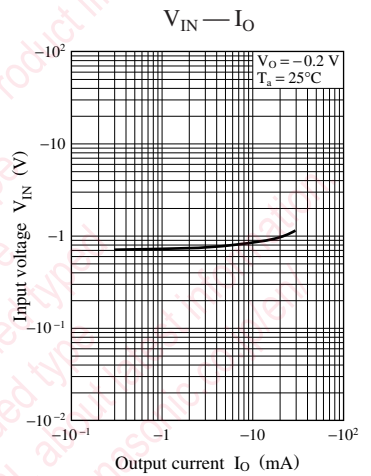
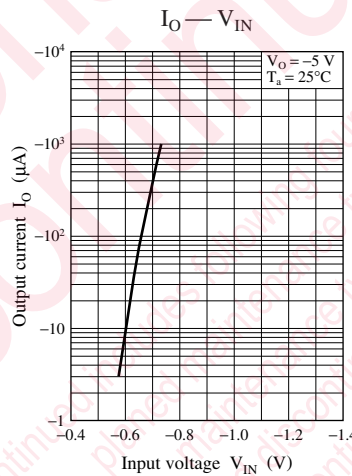
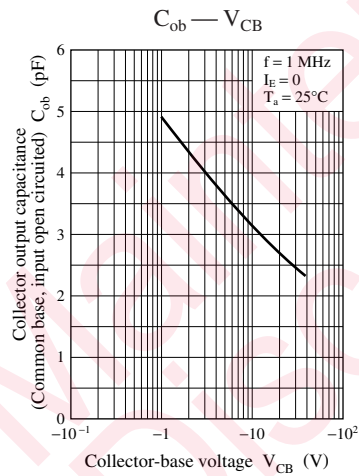
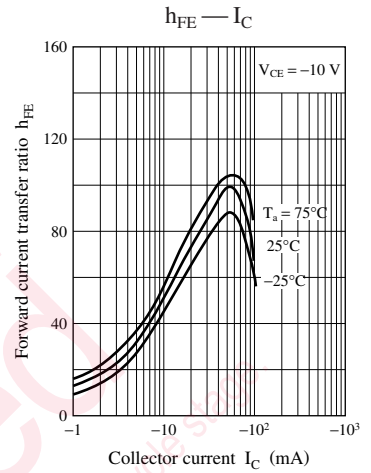
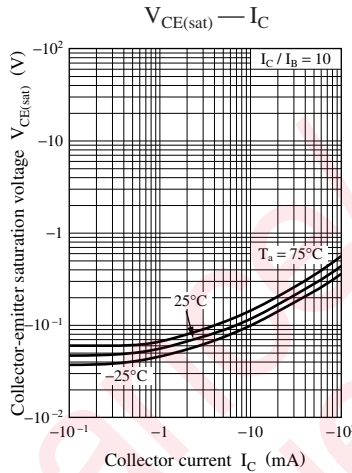
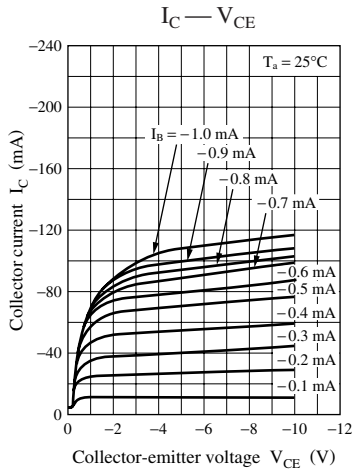




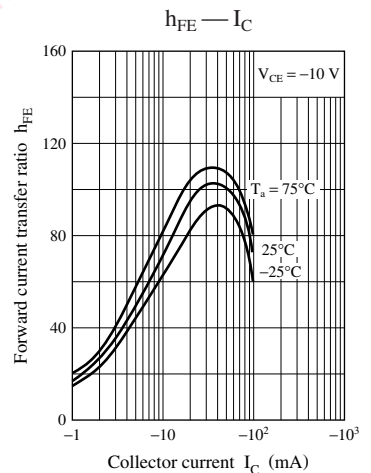
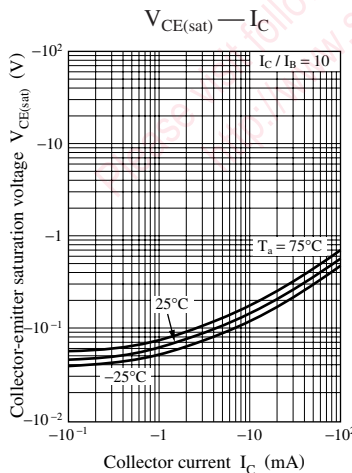
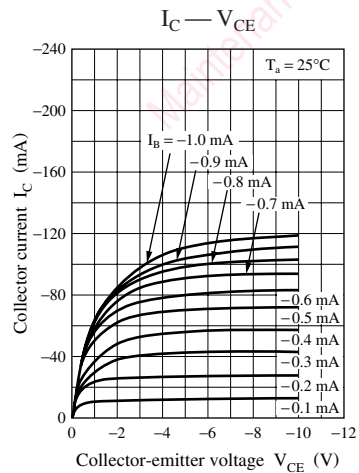
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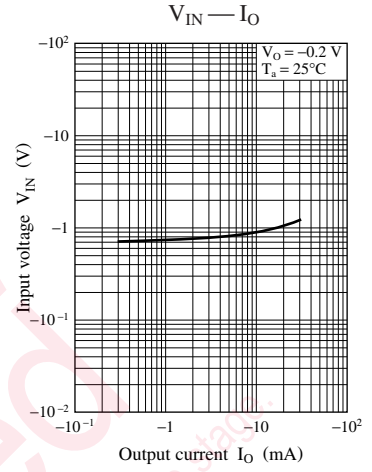
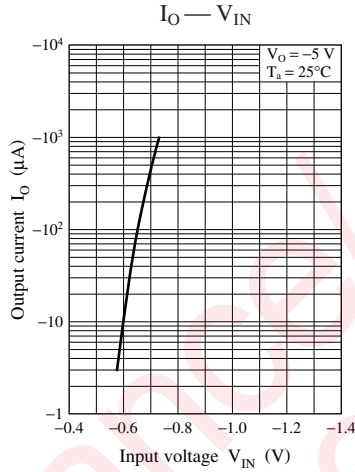
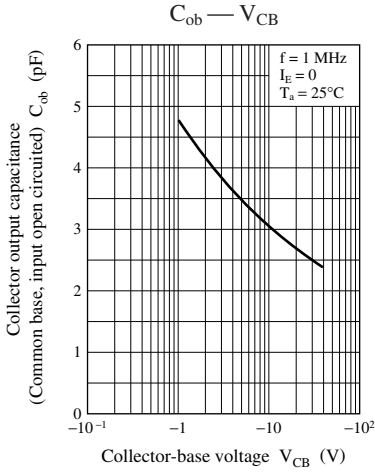


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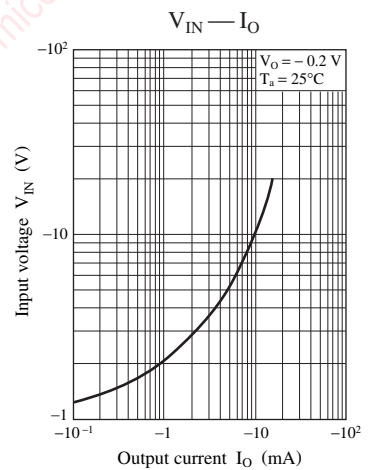
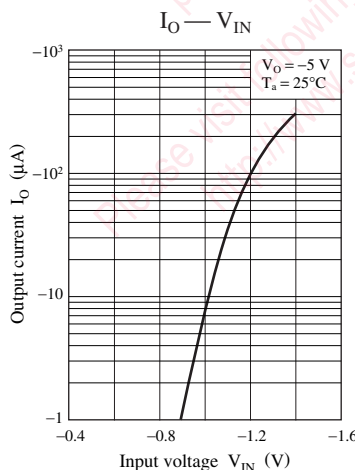
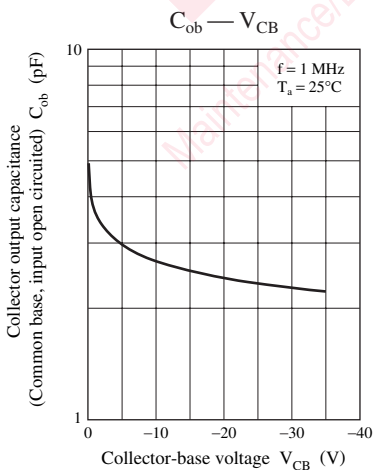
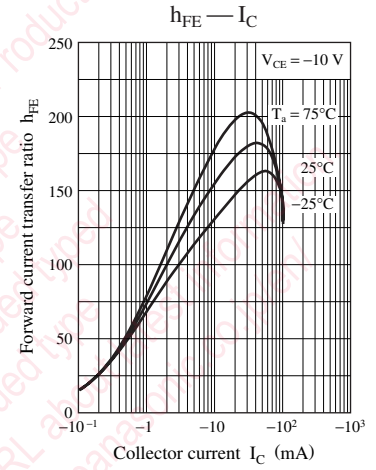
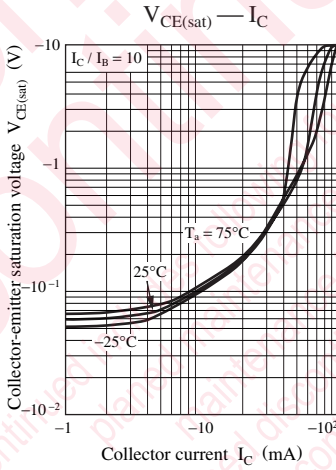
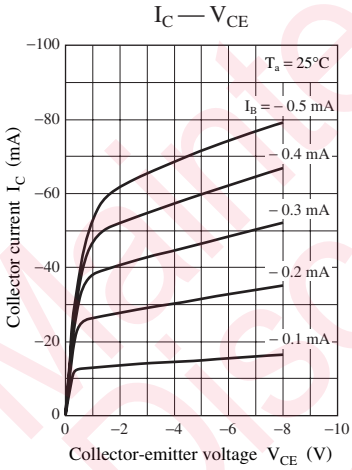


Characteristics charts of UNR9119J

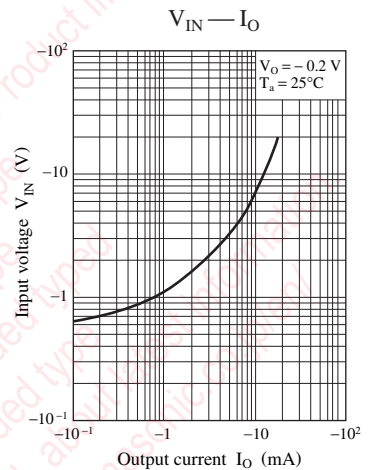
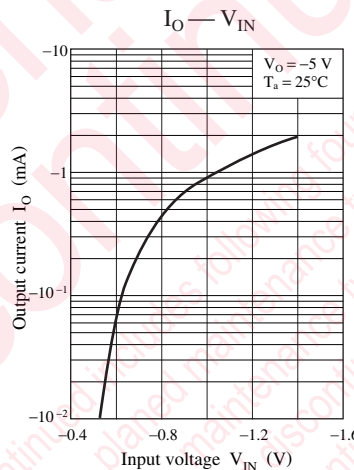
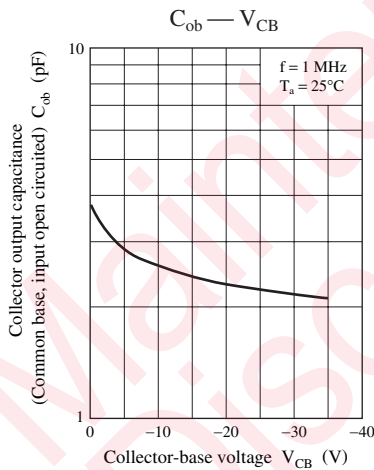
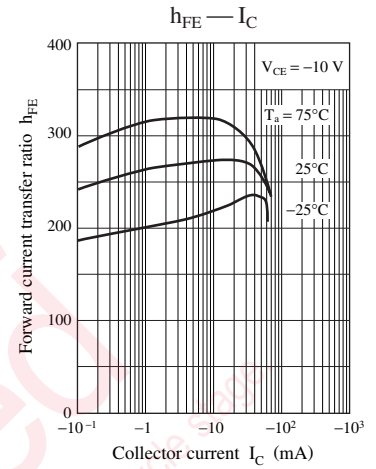
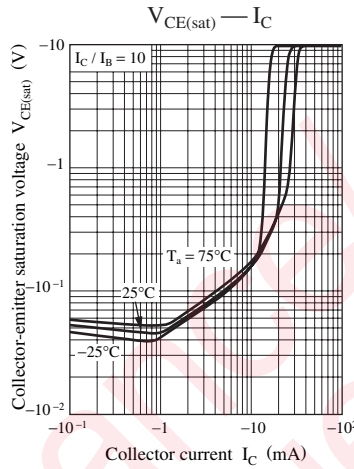
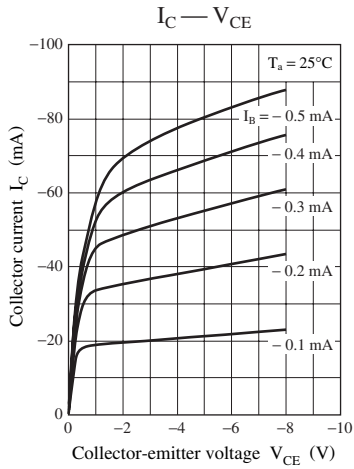




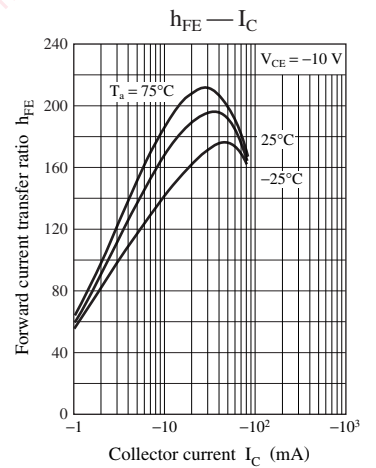
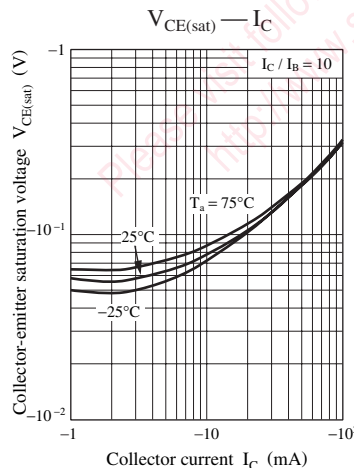
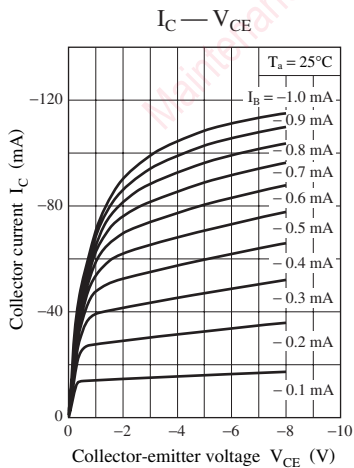
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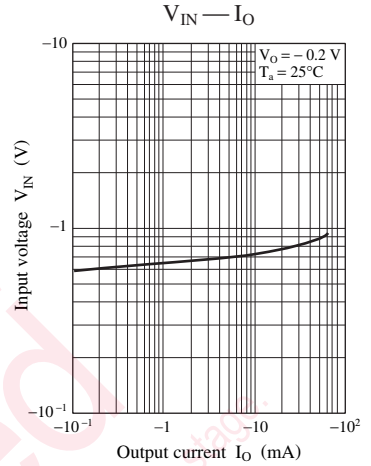
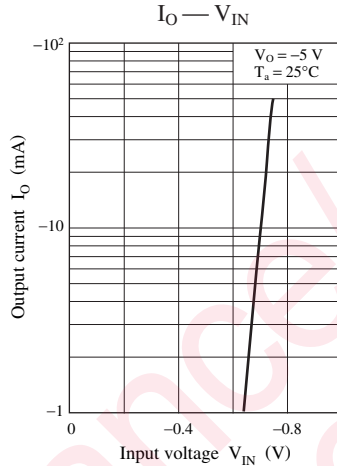
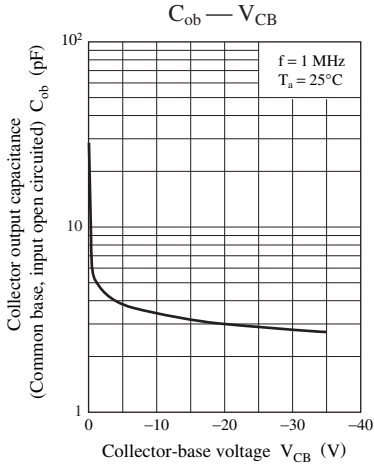


Characteristics charts of UNR911BJ

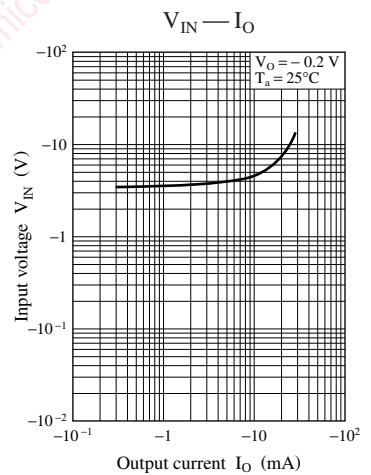
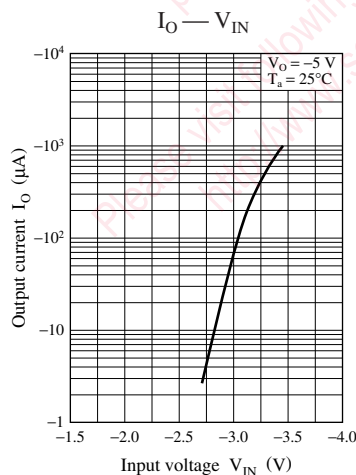
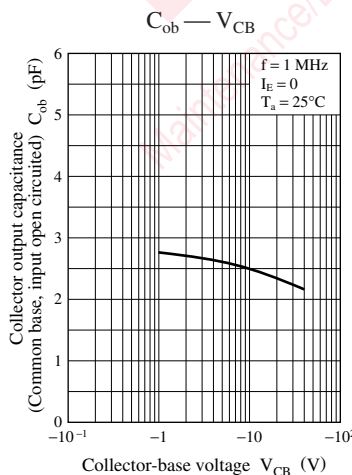
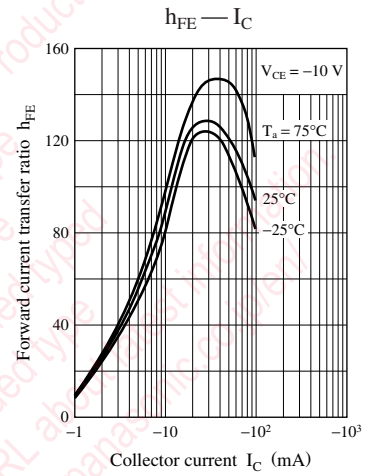
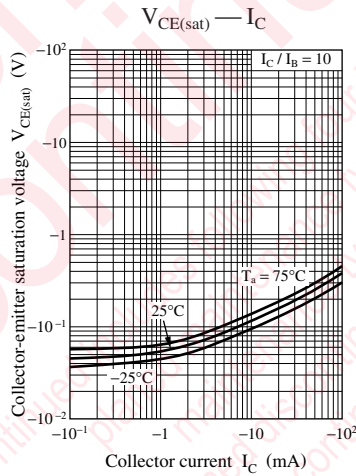
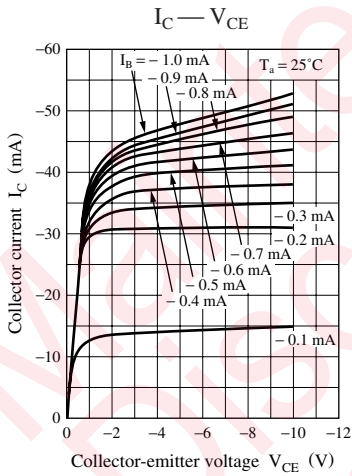


Characteristics charts of UNR911CJ

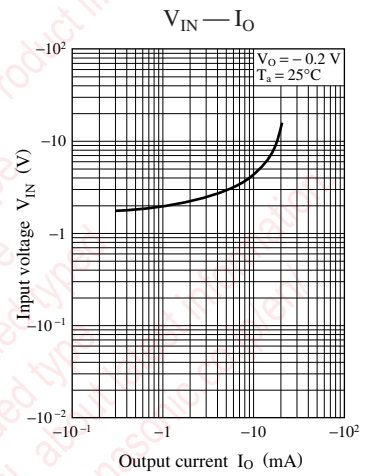
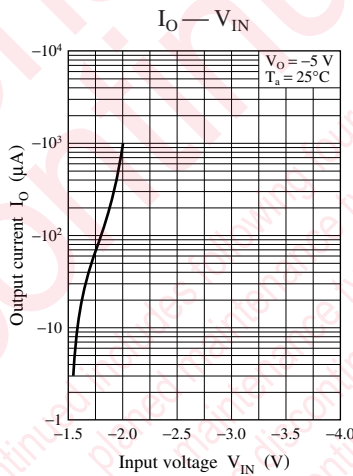
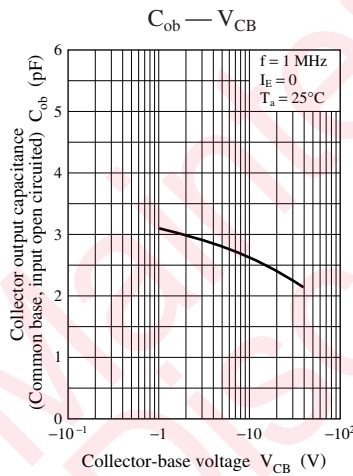
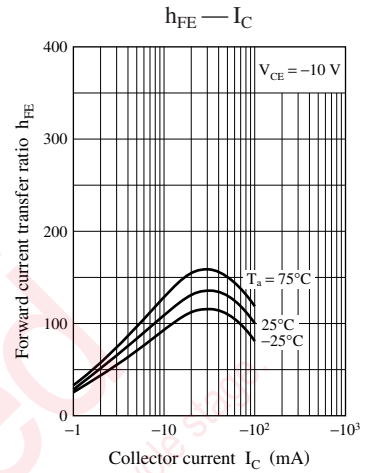
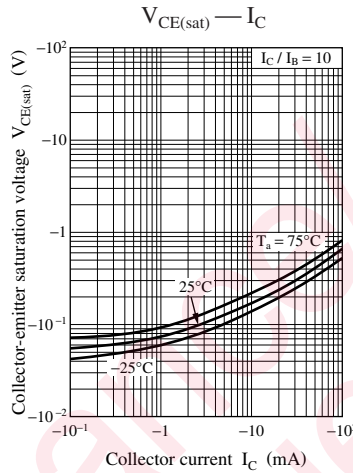
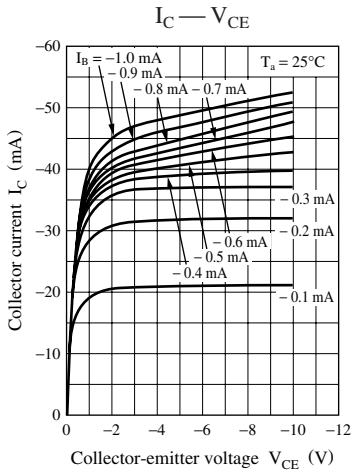




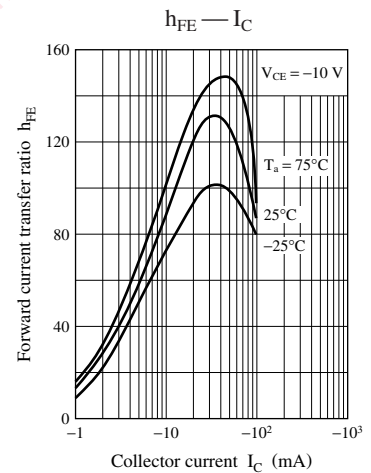
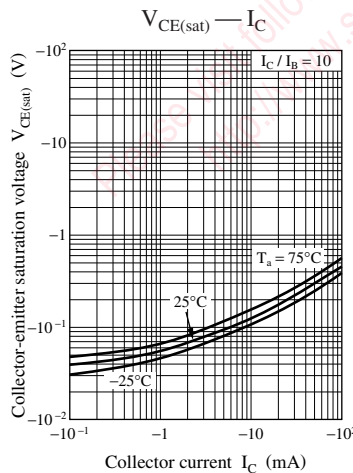
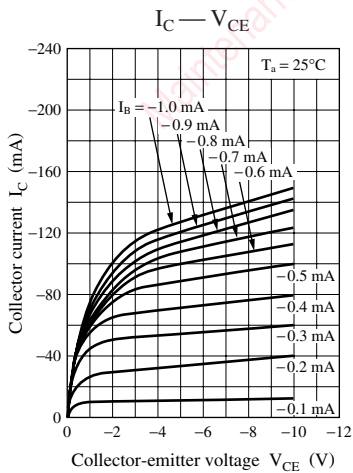
Characteristics charts of UNR911DJ

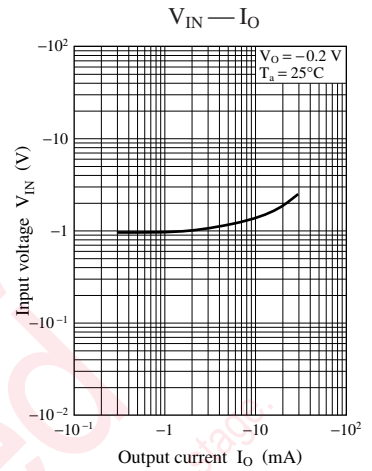
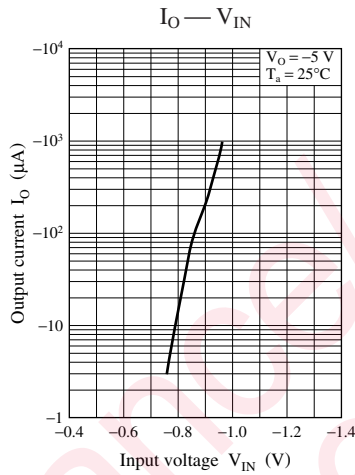
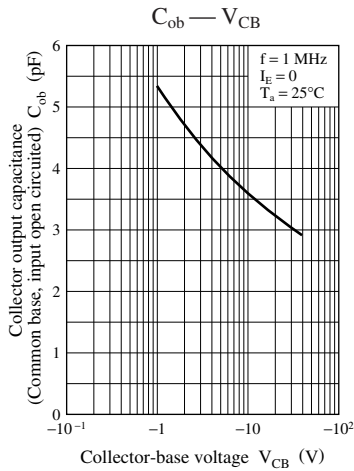


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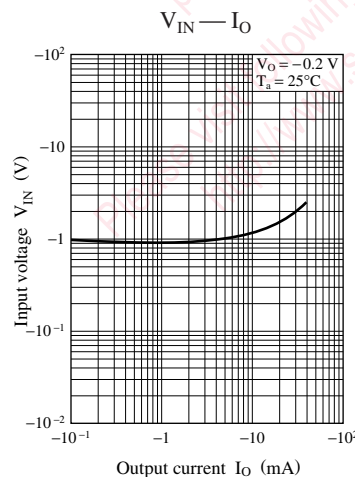
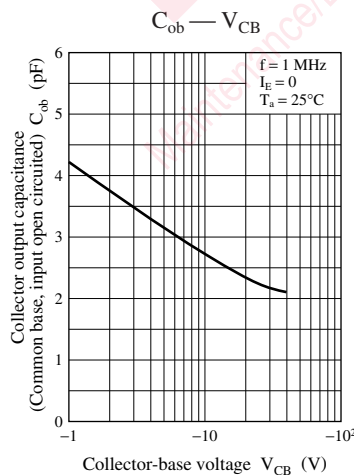
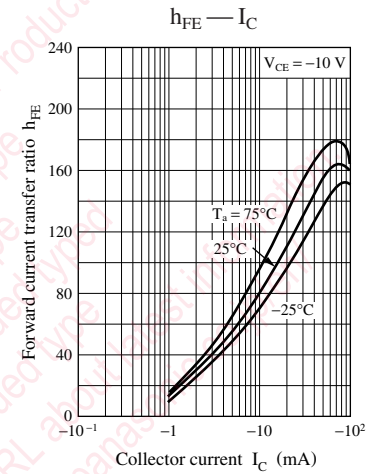
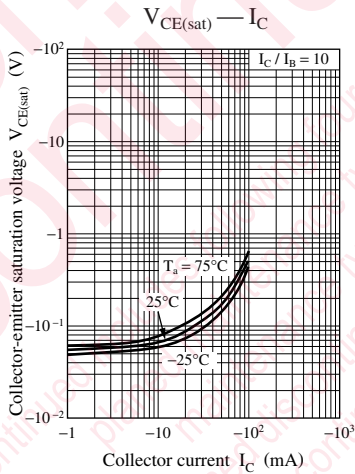
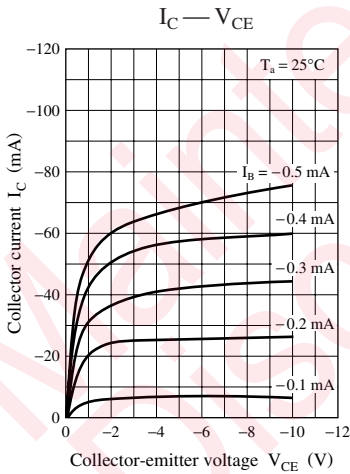


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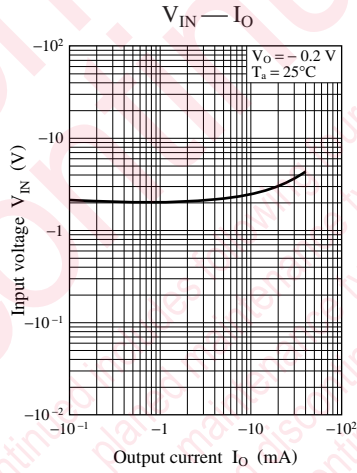
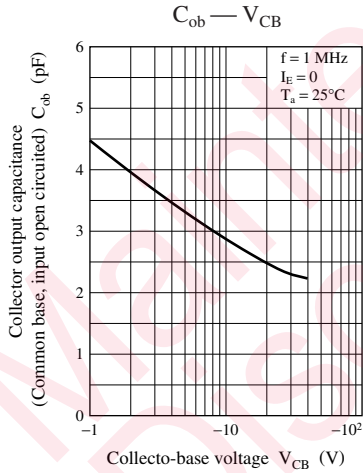
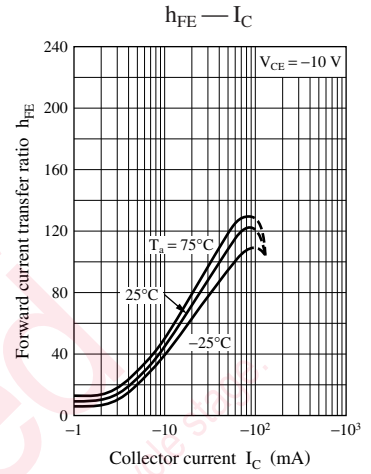
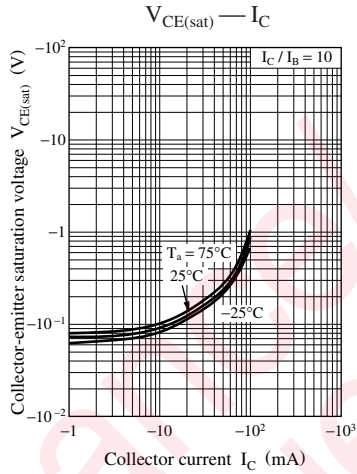
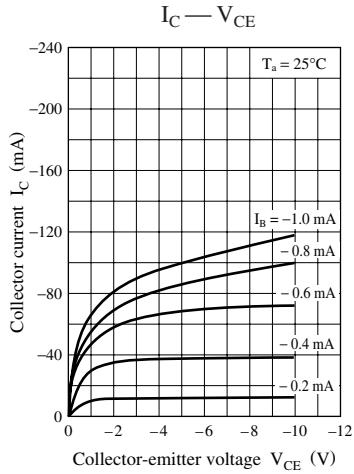




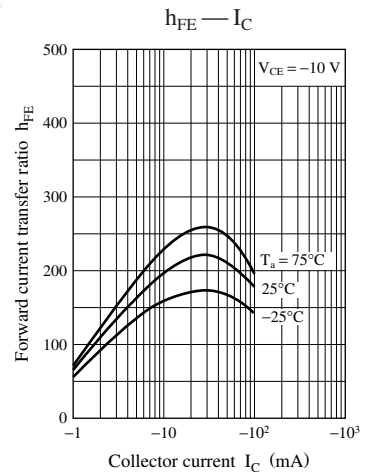
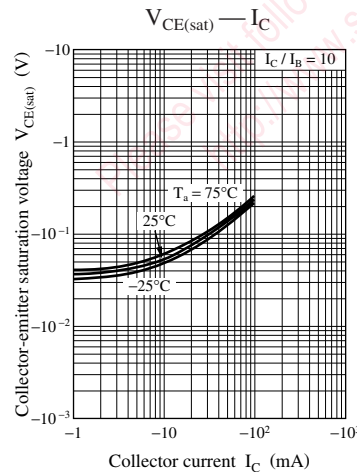
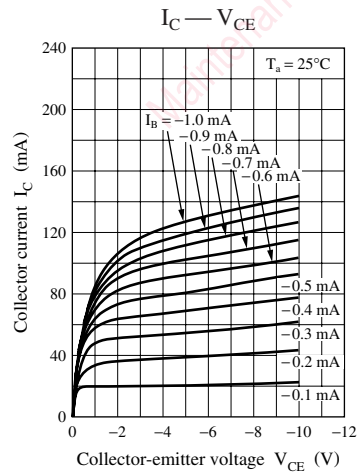
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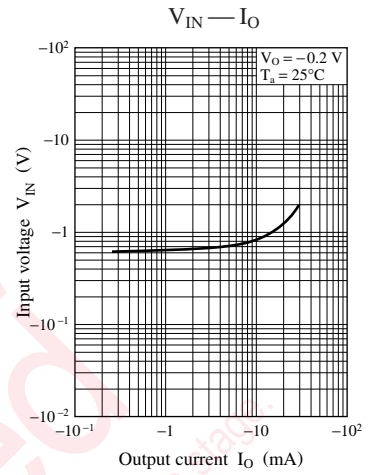
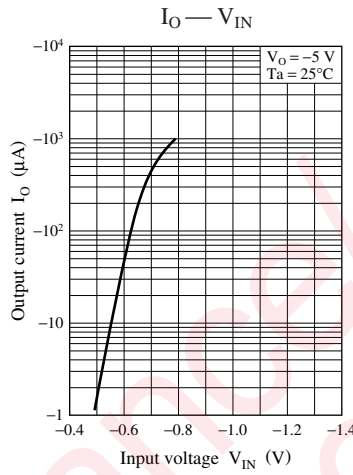
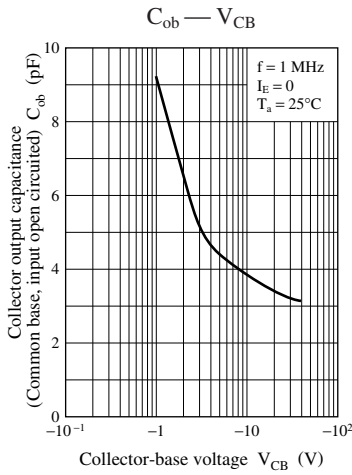


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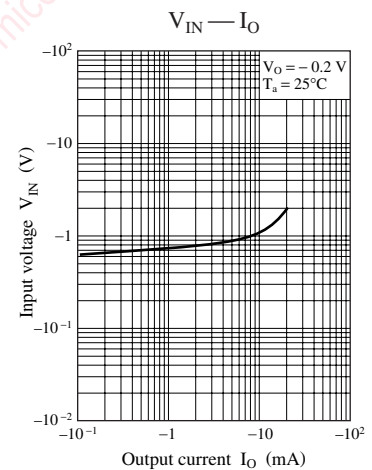
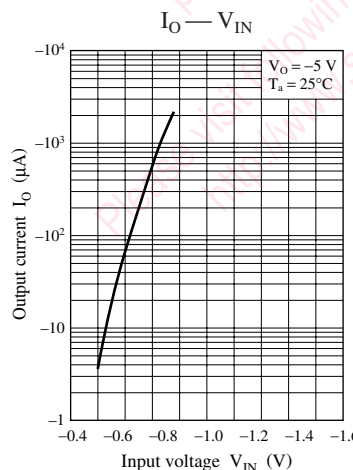
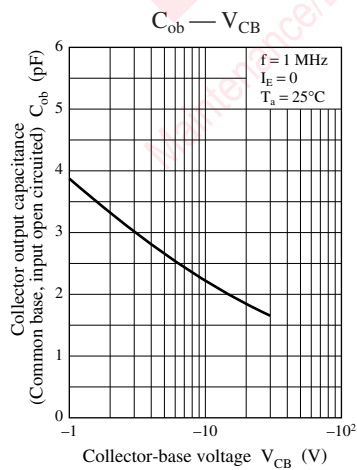
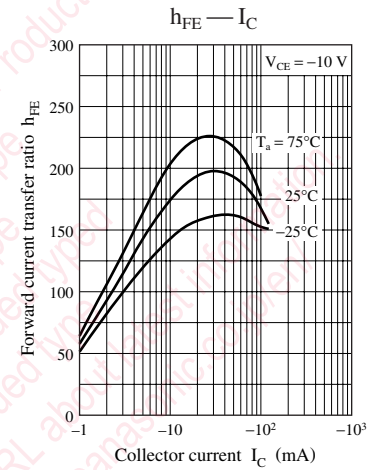
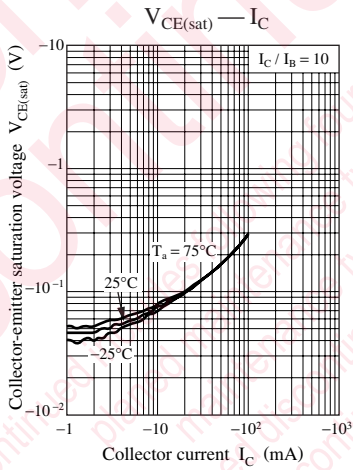
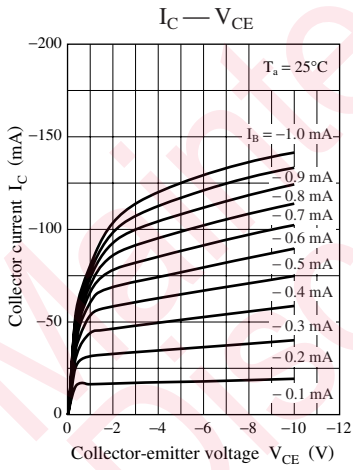


Characteristics charts of UNR911MJ

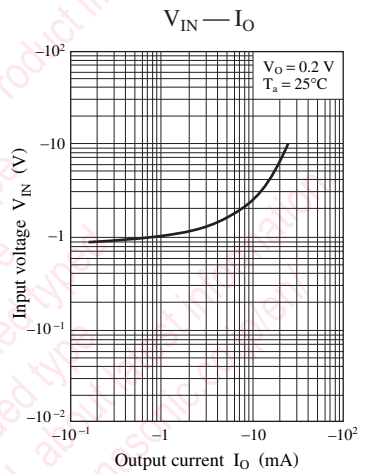
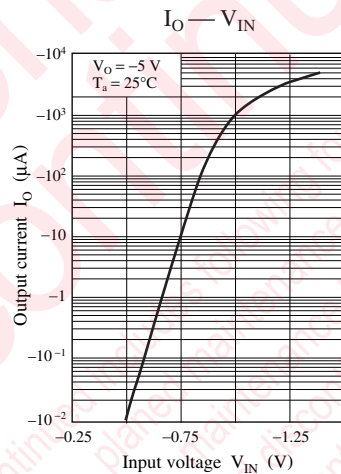
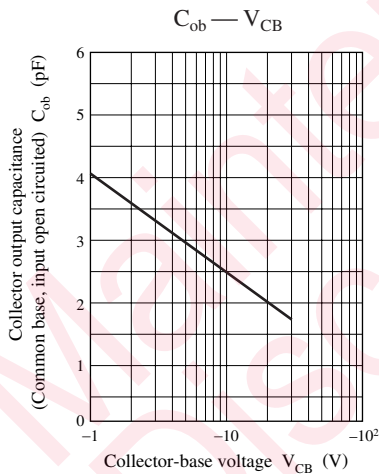
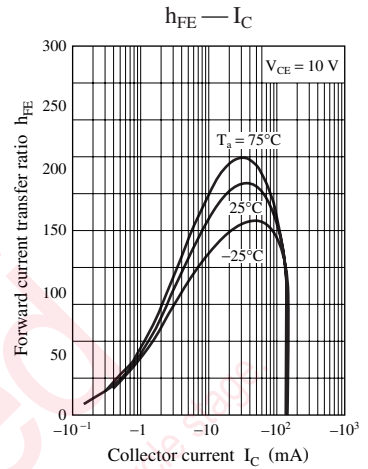
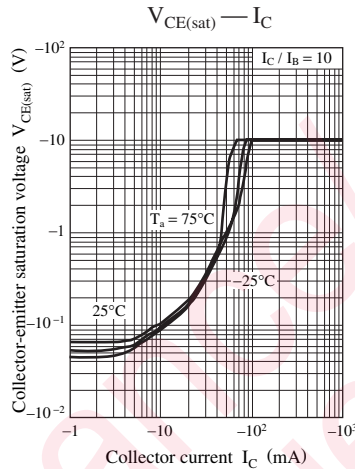
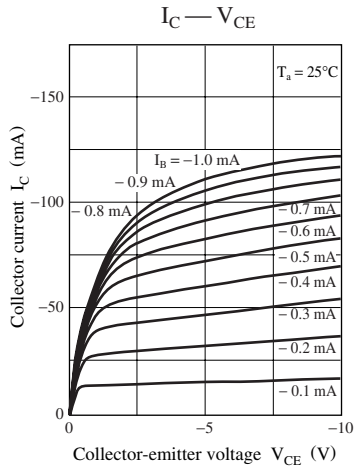




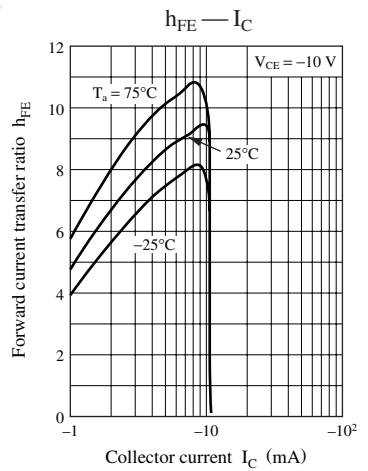
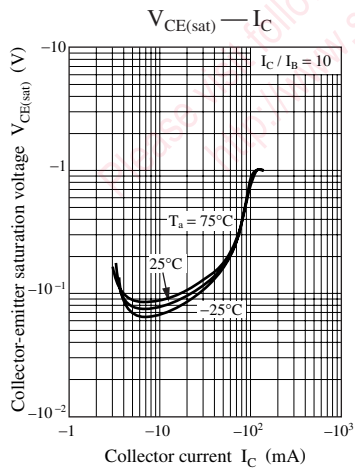
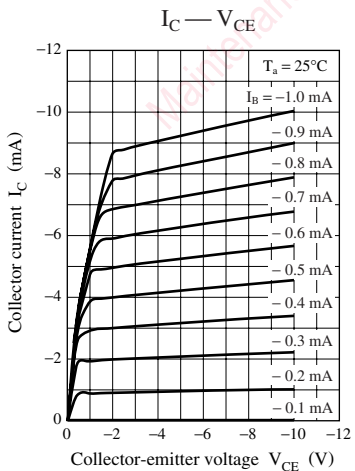
Characteristics charts of UNR911NJ

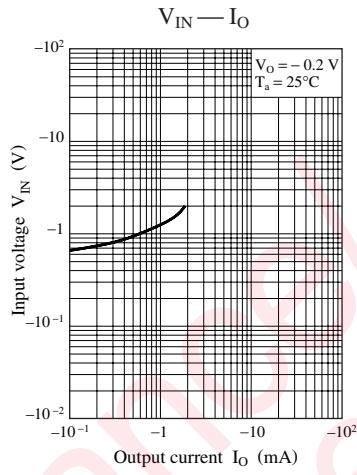
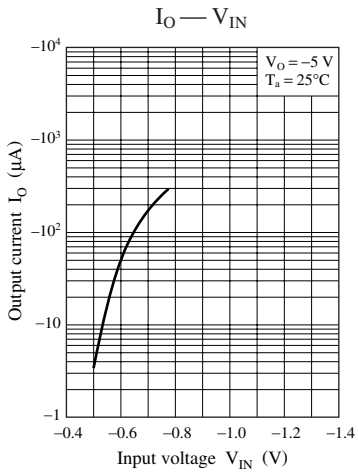


Characteristics charts of UNR911TJ



Characteristics charts of UNR911VJ





Maintenance/Discontinued includes following four Product lifecycle stage.
planned maintenance type
maintenance type
planned discontinued type
discontinued type
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