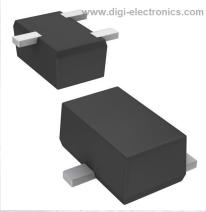


UNR515400L Datasheet

Ma



DiGi Electronics Part Number	UNR515400L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	UNR515400L
Description	TRANS PREBIAS PNP 30V SMINI3
Detailed Description	Pre-Biased Bipolar Transistor (BJT) PNP - Pre-Biase d 30 V 100 mA 80 MHz 150 mW Surface Mount SMin i3-G1

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Purchase and inquiry

Manufacturer Product Number:	Manufacturer:		
UNR515400L	Panasonic Electronic Components		
Series:	Product Status:		
	Obsolete		
Transistor Type:	Current - Collector (Ic) (Max):		
PNP - Pre-Biased	100 mA		
Voltage - Collector Emitter Breakdown (Max):	Resistor - Base (R1):		
30 V	10 kOhms		
Resistor - Emitter Base (R2):	DC Current Gain (hFE) (Min) @ lc, Vce:		
47 kOhms	80 @ 5mA, 10V		
Vce Saturation (Max) @ lb, lc:	Current - Collector Cutoff (Max):		
1.2V @ 330µA, 50mA	500nA		
Frequency - Transition:	Power - Max:		
80 MHz	150 mW		
Mounting Type:	Package / Case:		
Surface Mount	SC-70, SOT-323		
Supplier Device Package:	Base Product Number:		
SMini3-G1	UNR515		

Environmental & Export classification

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0095	

Transistors with built-in Resistor

Panasonic

UNR5154 (UN5154)

Silicon PNP epitaxial planar type

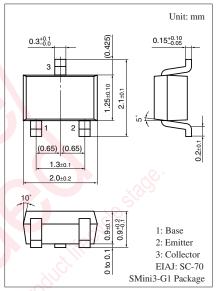
For digital circuits

Features

- High forward current transfer ratio h_{FE}
- Costs can be reduced through downsizing of the equipment and reduction of the number of parts
- S-Mini type package, allowing automatic insertion through tape packing and magazine packing

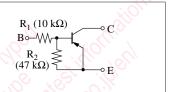
Absolute Maximum Ratings $T_a = 25^{\circ}C$

	u		
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-30	V
Collector-emitter voltage (Base open)	V _{CEO}	-30	V
Collector current	I _C	-100	mA
Total power dissipation	P _T	150	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C
			1



Marking Symbol: EV

Internal Connection



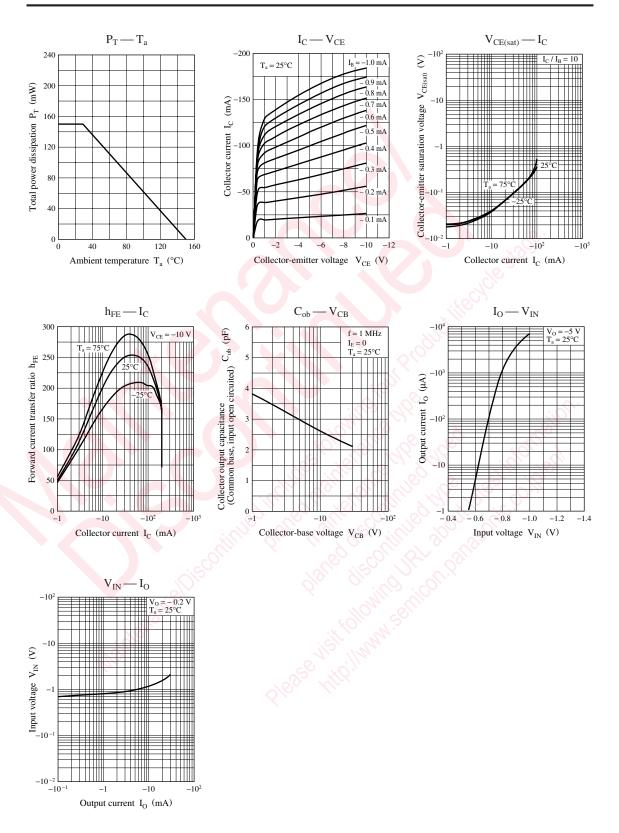
Electrical Characteristics	$r_a = 25 C$		N ⁻	5		
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -10 \ \mu A, I_{\rm E} = 0$	-30			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-30			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -30 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -30 \text{ V}, I_B = 0$			- 0.5	
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = -3 V, I_C = 0$			- 0.1	mA
Forward current transfer ratio	h _{FE}	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	80			
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -50$ mA, $I_{\rm B} = -0.33$ mA		- 0.5	-1.2	V
Output voltage high-level	V _{OH}	$V_{CC} = -5 \text{ V}, \text{ V}_{B} = -0.5 \text{ V}, \text{ R}_{L} = 1 \text{ k}\Omega$	-4.9			V
Output voltage low-level	V _{OL}	$V_{CC} = -5 \text{ V}, \text{ V}_{B} = -2.5 \text{ V}, \text{ R}_{L} = 1 \text{ k}\Omega$			- 0.2	V
Transition frequency	f _T	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Input resistance	R ₁		-30%	10	+30%	kΩ
Resistance ratio	R_1/R_2			0.213		

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

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

Note) The part number in the parenthesis shows conventional part number.

UNR5154



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