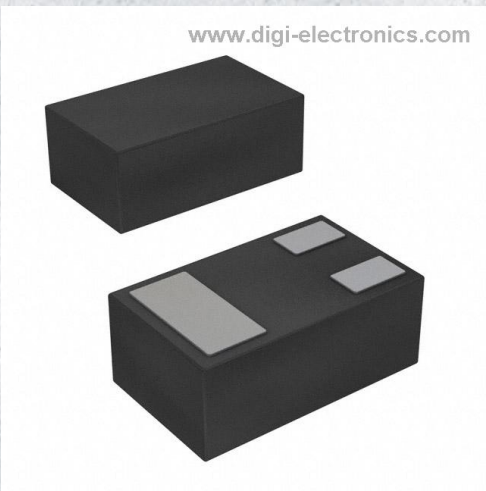
2SA216300A Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	2SA216300A-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	2SA216300A
Description	TRANS PNP 20V 0.03A ML3-N2
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 30 mA 300MHz 100 mW Surface Mount ML3-N2

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
2SA216300A	Panasonic Electronic Components
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	30 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
20 V	100mV @ 1mA, 10mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100µA	70 @ 1mA, 10V
Power - Max:	Frequency - Transition:
100 mW	300MHz
Operating Temperature:	Mounting Type:
125°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
SC-101, SOT-883	ML3-N2
Base Product Number:	
2SA2163	

Environmental & Export classification

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0075	

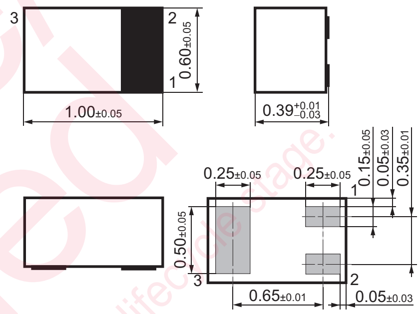
This product complies with the RoHS Directive (EU 2002/95/EC).

2SA2163

Silicon PNP epitaxial planar type

For high frequency amplification

Unit: mm



1: Base
2: Emitter
3: Collector

ML3-N2 Package

Marking Symbol: 6J

■ Features

- High transition frequency f_T
- Optimum for high-density mounting and downsizing of the equipment for Ultraminiature leadless package 0.6 mm × 1.0 mm (height 0.39 mm)

■ Absolute Maximum Ratings $T_a = 25°C$

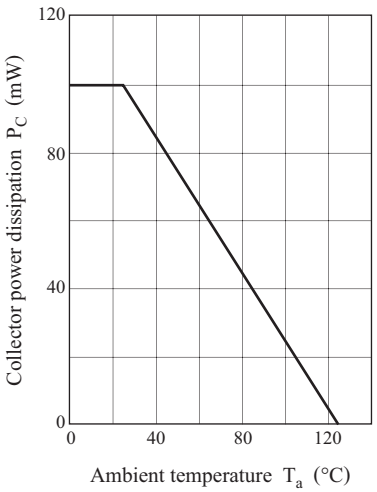
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	–30	V
Collector-emitter voltage (Base open)	V_{CEO}	–20	V
Emitter-base voltage (Collector open)	V_{EBO}	–5	V
Collector current	I_C	–30	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

■ Electrical Characteristics $T_a = 25°C±3°C$

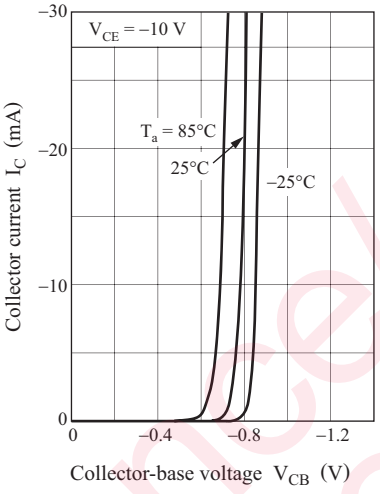
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Base-emitter voltage	V_{BE}	$V_{CE} = –10$ V, $I_C = –1$ mA		– 0.7		V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = –10$ V, $I_E = 0$			– 0.1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = –20$ V, $I_B = 0$			–100	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = –5$ V, $I_C = 0$			–10	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = –10$ V, $I_C = –1$ mA	70		220	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = –10$ mA, $I_B = –1$ mA		– 0.1		V
Transition frequency	f_T	$V_{CB} = –10$ V, $I_E = 1$ mA, f = 200 MHz	150	300		MHz
Noise figure	NF	$V_{CB} = –10$ V, $I_E = 1$ mA, f = 5 MHz		2.8	4.0	dB
Reverse transfer impedance	Z_{rb}	$V_{CB} = –10$ V, $I_E = 1$ mA, f = 2 MHz		22	50	Ω
Reverse transfer capacitance (Common emitter)	C_{re}	$V_{CB} = –10$ V, $I_E = 1$ mA, f = 10.7 MHz		1.2	2.0	pF

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

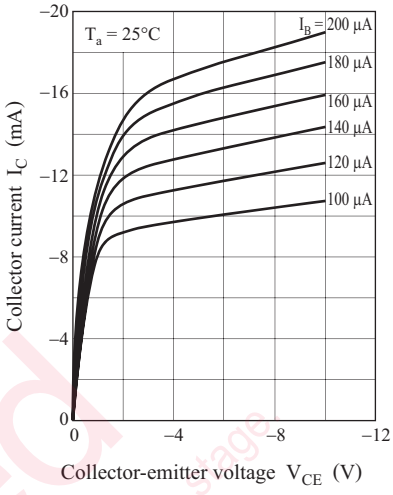
P_C — T_a



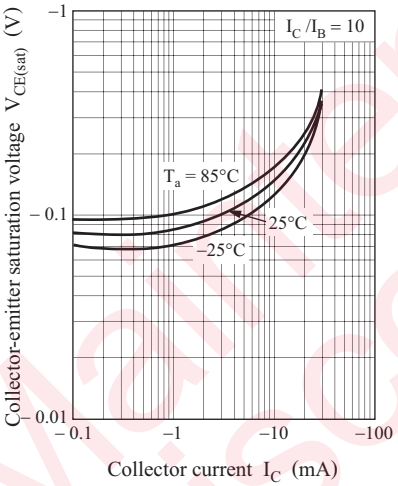
I_C — V_{CB}



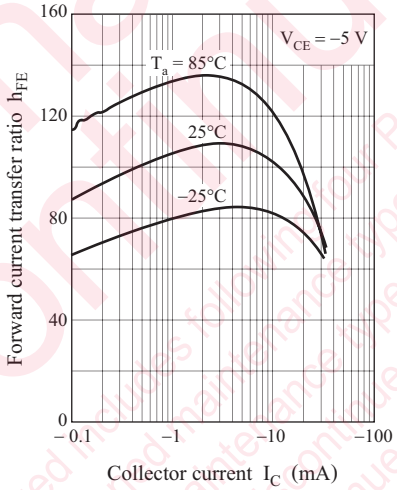
I_C — V_{CE}



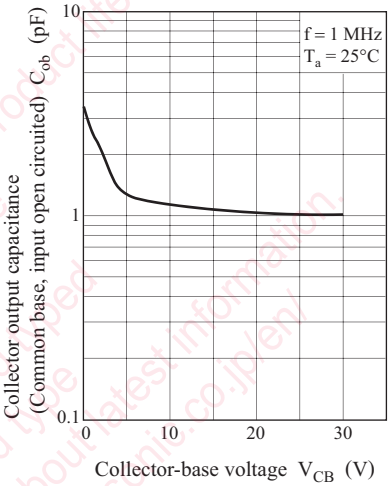
$V_{CE(sat)}$ — I_C



h_{FE} — I_C



C_{ob} — V_{CB}



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