

### **Features**

- Halogen Free. "Green" Device (Note 1)
- · Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

# PNP General Purpose Amplifier

### Maximum Ratings @ 25°C Unless Otherwise Specified

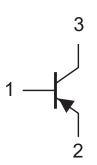
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-80	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-80	V
Emitter-Base Voltage	V <sub>EBO</sub>	-4	V
Collector Current	I <sub>C</sub>	-500	mA
Power Dissipation	P <sub>D</sub>	200	mW

### Thermal characteristics

Parameter	Symbol	Rating	Unit
Junction Temperature Range	T <sub>j</sub>	-55~+150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~+150	°C
Thermal Resistance from Junction to Ambient	Rth <sub>(J-A)</sub>	625	°C/W

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

### **Internal Structure**





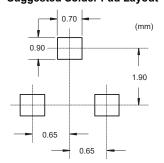
### **Marking Code**



# SOT-323

DIMENSIONS						
DIM	INCHES		M	M	NOTE	
DIIVI	MIN		MIN	MAX	NOTE	
Α	0.071	0.087	1.80	2.20		
В	0.045	0.053	1.15	1.35		
С	0.083	0.096	2.10	2.45		
D	0.026		0.65		TYP.	
Е	0.047	0.055	1.20	1.40		
F	0.012	0.016	0.30	0.40		
G	0.000	0.004	0.00	0.10		
Н	0.035	0.044	0.90	1.10		
J	0.002	0.010	0.05	0.25		
K	0.006	0.016	0.15	0.40		
L	0.010	0.018	0.26	0.46		

### **Suggested Solder Pad Layout**



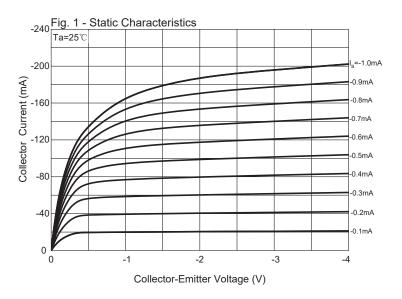


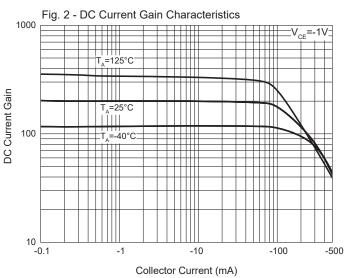
## Electrical Characteristics @ $T_A$ =25°C Unless Otherwise Specified

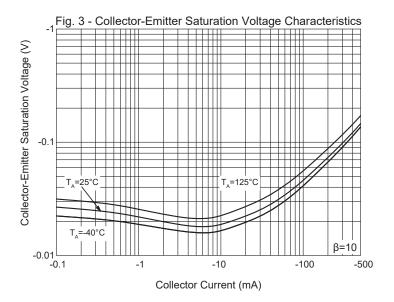
Parameter	Symbol	Min	Тур	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-80			V	I <sub>C</sub> =-100μA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage*	V <sub>(BR)CEO</sub>	-80			V	$I_C$ =-1mA, $I_B$ =0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-4			V	I <sub>E</sub> =-100μA, I <sub>C</sub> =0
Collector-Base Cutoff Current	I <sub>CBO</sub>			-0.1	μA	V <sub>CB</sub> =-80V, I <sub>E</sub> =0
Collector-Emitter Cutoff Current	I <sub>CES</sub>			-0.1	μA	V <sub>CE</sub> =-60V, I <sub>B</sub> =0
Emitter-Base Cutoff Current	I <sub>EBO</sub>			-0.1	μA	$V_{EB}$ =-4V, $I_C$ =0
DC Current Gain	h <sub>FE(1)</sub>	100				$V_{CE}$ =-1V, $I_{C}$ =-10mA
Do Guirent Gain	h <sub>FE(2)</sub>	100				V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			-0.25	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			-1.2	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA
Transition Frequency	f <sub>T</sub>	100			MHz	V <sub>CE</sub> =-20V, I <sub>C</sub> =-10mA, f=100MHz
Output Capacitance	C <sub>ob</sub>			11	pF	$V_{CB}$ =-5V, $I_E$ =0,f=1MHz

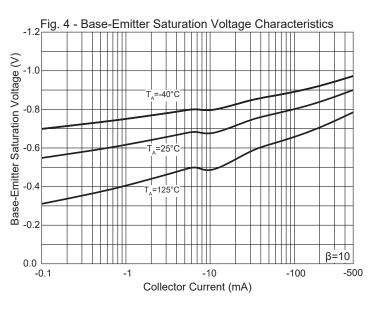


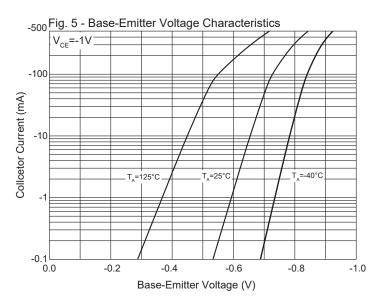
### **Curve Characteristics**

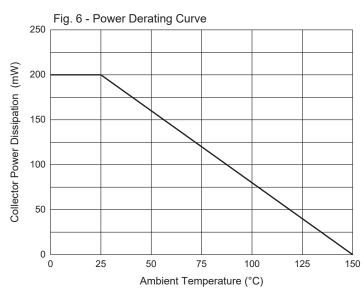














### **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 3Kpcs/Reel		

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