

# Features

- Built-In Bias Resistors Enable the Configuration of an Inverter Circuit Without Connecting External Input Resistors
- The Bias Resistors Consist of Thin-Film Resistors With Complete Isolation to Allow Negative Biasing of the Input. They Also Have the Advantage of Almost Completely Eliminating Parasitic Effects
- Only the On/Off Conditions Need to Be Set For Operation, Making Device Design Easy
- 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)

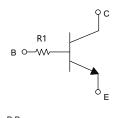
### Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value	Unit
Collector-Emitter Voltage	$V_{CEO}$	50	V
Collector-Base Voltage	V <sub>CBO</sub>	50	V
Emitter-Base Voltage	$V_{\text{EBO}}$	5	V
Collector Current-Continuous	I <sub>C</sub>	100	mA
Collector Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	TJ	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

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

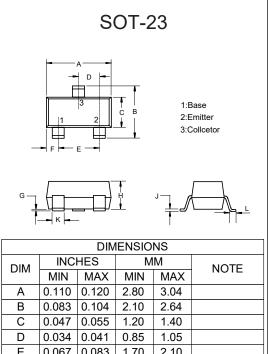
### Device Marking: 06

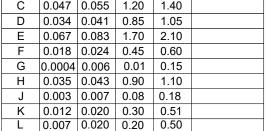
#### Internal Structure

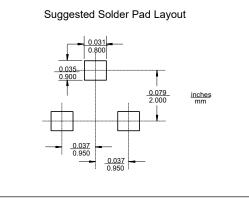


B:Base C:Collcetor E:Emitter









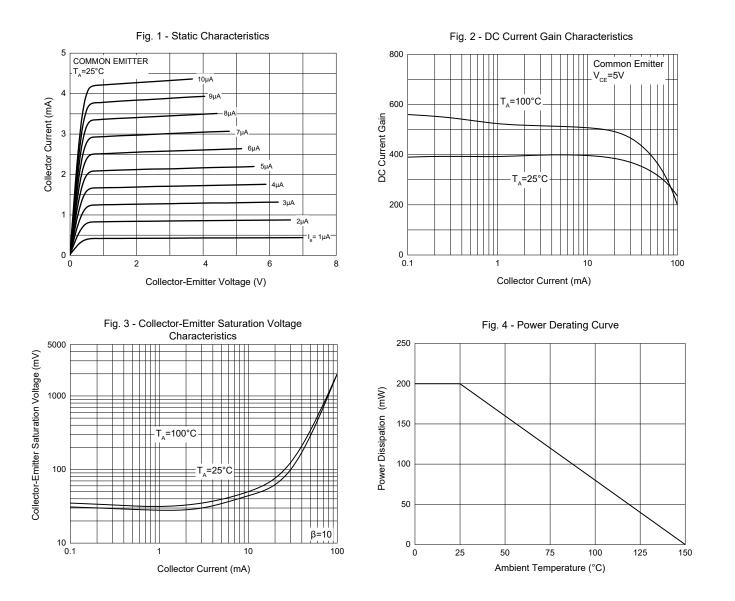


# Electrical Characteristics @ 25° C UnlessOtherwise Specified

Parameter	Symbol	Min	Тур	Max	Units	Conditions
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	50			V	Ι <sub>C</sub> =50μΑ, Ι <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	50			V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	5			V	I <sub>E</sub> =50μΑ, I <sub>C</sub> =0
Collector Cut-off Current	I <sub>CBO</sub>			0.5	μA	V <sub>CB</sub> =50V,I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			0.5	μA	V <sub>EB</sub> =4V,I <sub>C</sub> =0
DC Current Gain	h <sub>FE</sub>	100	300	600		I <sub>C</sub> =1mA, V <sub>CE</sub> =5V
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			0.3	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
Input Resistance	R <sub>1</sub>	32.9	47	61.1	KΩ	
Transition Frequency	f <sub>T</sub>		250		MHz	V <sub>CE</sub> =10.0V, I <sub>E</sub> =-5mA, f=100MHz



## **Curve Characteristics**





### **Ordering Information**

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

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