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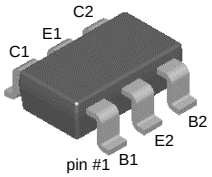
FMB5551

NPN General Purpose Amplifier
SuperSOT-6 Surface Mount Package

- This device is designed for general purpose high voltage amplifiers and gas discharge display driving.
- Sourced from process 16.
- See MMBT5551 for characteristics.



SuperSOT™-6
Mark: .3S
Dot denotes pin #1

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	160	V
V_{CBO}	Collector-Base Voltage	180	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	600	mA
P_C	Collector Dissipation (T_a=25°C) *	0.7	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature Range	- 55 ~ 150	°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	180	°C/W

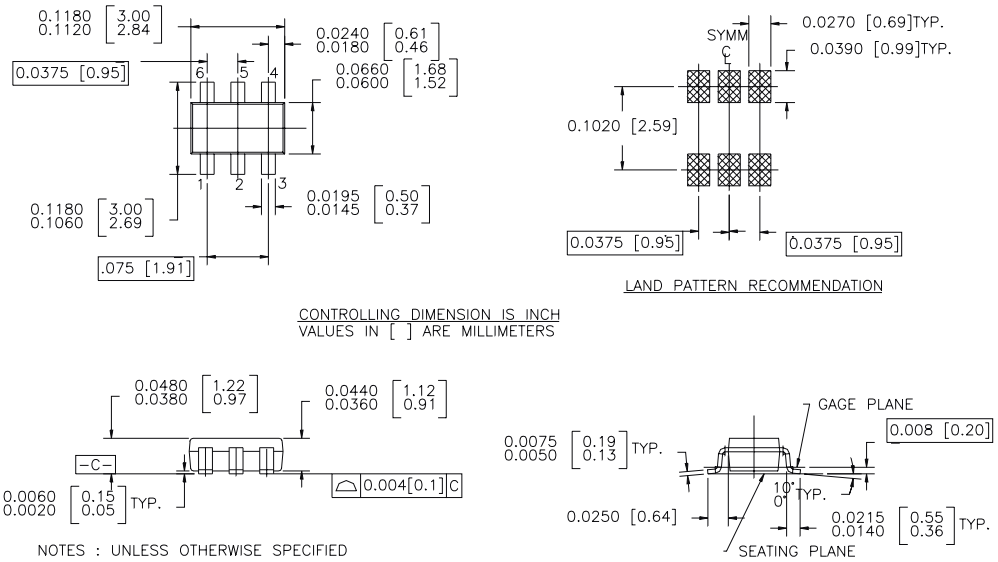
* Pd total, for both transistors. For each transistor, Pd = 350mW.

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
Off Characteristics						
BV_{CEO}	Collector-Emitter Voltage	I_C = 1mA	160			V
BV_{CBO}	Collector-Base Voltage	I_C = 10μA	180			V
BV_{EBO}	Emitter-Base Voltage	I_E = 10μA	6			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 120V V_{CB} = 120V, T = 100°C			50 50	nA μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4V			50	nA
On Characteristics						
h_{FE}	DC Current Gain	V_{CE} = 5V, I_C = 1mA V_{CE} = 5V, I_C = 10mA V_{CE} = 5V, I_C = 50mA	80 80 30		 250	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 10mA, I_B = 1mA I_C = 50mA, I_B = 5mA			0.15 0.2	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C = 10mA, I_B = 1mA I_C = 50mA, I_B = 5mA			1 1	V
Small Signal Characteristics				**TYPICAL**		
C_{ob}	Output Capacitance	V_{CB} = 10V, f = 1MHz			6	pF
C_{ib}	Input Capacitance	V_{CB} = 0.5V, f = 1MHz			20	pF
f_T	Current gain Bandwidth Product	V_{CE} = 10V, I_C = 10mA f = 100MHz	100		300	MHz
NF	Noise Figure	V_{CE} = 5V, I_C = 200μA f = 1MHz, R_S = 2kΩ, B = 200Hz			8	dB
h_{FE}	Small Signal Current Gain	V_{CE} = 10V, I_C = 1mA f = 1KHz	50		250	

Package Dimensions

SuperSOT™-6



NOTES : UNLESS OTHERWISE SPECIFIED

1.0 STANDARD LEAD FINISH : 150 MICROINCHES 93.81 MICROMETERS) MINIMUM TIN / LEAD (SOLDER) ON COPPER.

2.0 NO JEDEC REGISTRATION AS OF JULY 1996

SUPER SOT 6 LEADS

Dimensions in Millimeters

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