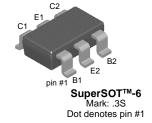


FMB5551

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.



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.

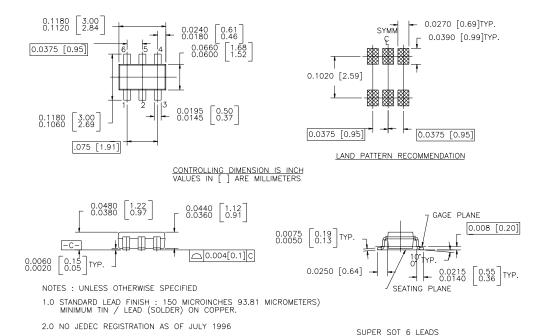
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
Off Charact	eristics	•	•	•		
BV _{CEO}	Collector-Emitter Voltage	I _C = 1mA	160			V
BV _{CBO}	Collector-Base Voltage	$I_C = 10\mu A$	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 Characte	eristics			•	•	
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	$I_C = 10\text{mA}, I_B = 1\text{mA}$ $I_C = 50\text{mA}, I_B = 5\text{mA}$			0.15 0.2	V
V _{BE} (sat)	Base-Emitter Saturation Voltage	$I_C = 10\text{mA}, I_B = 1\text{mA}$ $I_C = 50\text{mA}, I_B = 5\text{mA}$			1	V
Small Signa	I Characteristics			TYP	ICAL	
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	$V_{CE} = 5V, I_{C} = 200\mu A$ $f = 1MHz, R_{S} = 2k\Omega, B = 200Hz$			8	dB
h _{FE}	Small Signal Current Gain	V _{CE} = 10V, I _C = 1mA f = 1KHz	50		250	

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Package Dimensions

SuperSOT™-6



Dimensions in Millimeters

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	CoolFET™	FRFET™	MicroFET™	QFET [®]	SuperSOT™-8
	CROSSVOLT™	GlobalOptoisolator™	MicroPak™	QS™	SyncFET™
	DOME™	GTO™	MICROWIRE™	QT Optoelectronics™	TinyLogic [®]
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	FACT Quiet Series™		OPTOLOGIC [®]	SILENT SWITCHER®	VCX TM
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	The Power Franchise	®	PACMAN™	SPM™	
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Definition of Terms

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