勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-54151736 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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#### **MMBT5551**

# **NPN Plastic**

## **Encapsulate Transistor**

### **Features**

- Collector Current: I<sub>CM</sub>=0.6A
- Collector-Base Voltage: V<sub>(BR)CBO</sub>=180V
- Operating And Storage Temperatures -55°C to 150°C
- Capable of 0.3Watts of Power Dissipation
- Marking: G1
- Case Material: Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

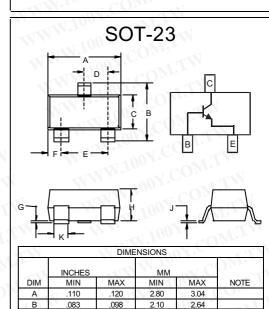
Symbol	Parameter	Min	Max	Units
OFF CHARAC	CTERISTICS	100	7.0	$M_{JJA}$
V <sub>(BR)CEO</sub>	Collector -Emitter Breakdown Voltage (L=1.0mAdc, I <sub>B</sub> =0)	160	01/10	Vdc
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (l <sub>c</sub> =100uAdc, l <sub>E</sub> =0)	180	007	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I <sub>E</sub> =10uAdc, I <sub>C</sub> =0)	6.0	10m.	Vdc
l <sub>сво</sub>	Collector Cutoff Current (V <sub>CB</sub> =120Vdc, I <sub>E</sub> =0)	WW	0.1	uAdc
Ево	Emitter Cutoff Current (V <sub>EB</sub> =4.0Vdc, I <sub>C</sub> =0)	WW	0.1	uAdc

#### ON CHARACTERISTICS

h <sub>FE-1</sub>	DC Current Gain (V <sub>CE</sub> =5.0Vdc, b=1.0mAdc)	80	11	007.C
h <sub>FE-2</sub>	DC Current Gain (V <sub>CE</sub> =5.0Vdc, b=10mAdc)	100	200	100X
h <sub>FE-3</sub>	DC Current Gain (V <sub>CE</sub> =5.0Vdc, <sub>b</sub> =50mAdc)	50	1177	N.TOO?
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (L=50mAdc, L=5.0mAdc)		0.5	Vdc
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage (I <sub>C</sub> =50mAdc,I <sub>B</sub> =5.0mAdc)	~\ <del>\</del>	1.0	Vdc

#### **SMALL-SIGNAL CHARACTERISTICS**

f <sub>T</sub>	Current Gain-Bandwidth Product		W
	( $\xi$ =10mAdc, $V_{CE}$ =5.0Vdc, f=30MHz)	100	 MHz



#### Suggested Solder Pad Layout

.89

1.78

.013

1.40

1.03

2.05

.100

.055

.041

.081

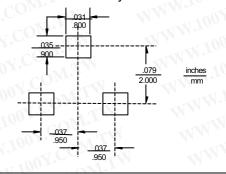
.0039

.044

.035

.070

.0005





#### **Ordering Information**

Device	Packing	
(Part Number)-TP	Tape&Reel3Kpcs/Reel	

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