

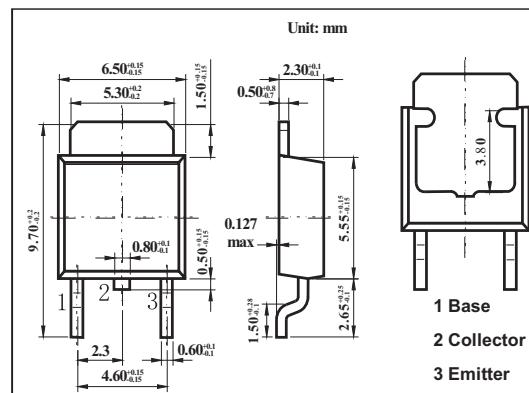
## TO-252 Plastic-Encapsulate Transistors

### FEATURES

- High Transiton Frequency:  $F_t=100\text{MHz}$
- NPN Silicon Epitaxial Transistor

### MECHANICAL DATA

- Case style:TO-252 molded plastic
- Mounting position:any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to base voltage	VCBO	160	V
Collector to emitter voltage	VCEO	160	V
Emitter to base voltage	VEBO	5	V
Collector current	I <sub>C</sub>	1.5	A
Base Current	I <sub>B</sub>	0.3	A
Total Power dissipation $T_a = 25\text{ }^\circ\text{C}$ $T_c = 25\text{ }^\circ\text{C}$	PC	1 15	W W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> =160V,I <sub>E</sub> =0			1	uA
emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> =5V,I <sub>C</sub> =0			1	uA
Collector-Emitter Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =10mA,I <sub>B</sub> =0	160			V
Emitter-Base Breakdown Voltage	V(BR)EBO	I <sub>E</sub> =1mA,I <sub>C</sub> =0	5			V
DC current Gain	H <sub>FE</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =100mA	70		240	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA,I <sub>B</sub> =50mA			1.5	V
Base- Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =500mA			1	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =10V,I <sub>C</sub> =100mA	100			MHz
Collector Output Capacitance	C <sub>OB</sub>	V <sub>CB</sub> =10V,I <sub>E</sub> =0,f=1MHz		25		pF