

**TRANSISTOR (PNP)**
**Plastic-Encapsulate Transistor**
**FEATURES**

Power dissipation

$$P_{CM} : 500\text{mW (Tamb}=25^{\circ}\text{C)}$$

Collector current

$$I_{CM} : -800\text{mA}$$

Collector-base Voltage

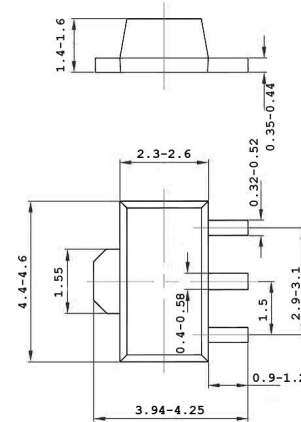
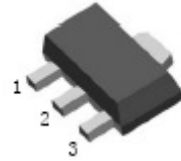
$$V_{(BR)CBO} : -120\text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg} : -55^{\circ}\text{C to } +150^{\circ}\text{C}$$

**MARKING: DO, DY**
**SOT-89**

1. BASE
2. COLLECTOR
3. EMITTER



UNIT:mm

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ELECTRICAL CHARACTERISTICS**

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-120			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-120			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-1\text{mA}, I_C=0$	-5			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-120\text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$	80		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1	V
Base-Emitter Voltage	$V_{BE}$	$I_C=-500\text{mA}, V_{CE}=-5\text{V}$			-1	V
Transition Frequency	$f_T$	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$		120		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			30	pF

**CLASSIFICATION OF  $h_{FE}$** 

Rank	O	Y
Range	80-160	120-240