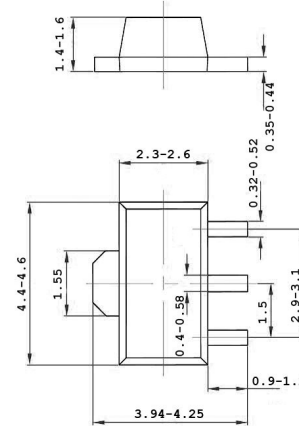
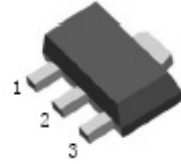


**TRANSISTOR (NPN)**
**Plastic-Encapsulate Transistor**
**FEATURES**

- Excellent DC current gain characteristics
- Complements the 2SB1386

**MARKING: AHQ, AHR**
**SOT-89**

1. BASE
2. COLLECTOR
3. EMITTER



UNIT:mm

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**MAXIMUM RATINGS**

Parameters	Symbols	Value	UNITS
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	20	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current - Continuous	$I_C$	5	A
Collector Dissipation	$P_C$	500	mW
Junction and Storage Temperature	$T_J, T_{stg}$	-55-150	°C

**ELECTRICAL CHARACTERISTICS**

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	50			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	20			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	6			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=40V, I_E=0$			0.5	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.5	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2V, I_C=0.5A$	120		390	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=100mA$			1	V
Transition Frequency	$f_T$	$V_{CE}=6V, I_C=50mA, f=100MHz$		150		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=20V, I_E=0, f=1MHz$		30		pF

**CLASSIFICATION OF  $h_{FE(1)}$** 

Rank	Q	R
Range	120-270	180-390

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