

2SC4548 TRANSISTOR (NPN)

FEATURES

Power dissipation

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

Collector current

$$I_{CM}: 200 \text{ mA}$$

Collector-base voltage

$$V_{(BR)CBO}: 400 \text{ V}$$

Operating and storage junction temperature range

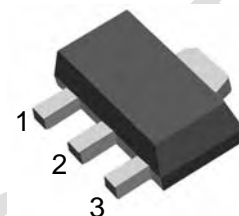
$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=300\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10\text{V}, I_C=50\text{mA}$	60		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			1	V
Transition frequency	f_T	$V_{CE}=30\text{V}, I_C=10\text{mA}$		70		MHz
Collector output capacitance	C_{ob}	$V_{CB}=30\text{V}, I_E=0, f=1\text{MHz}$		4		pF
Turn-ON Time	t_{on}	$V_{CC}=150\text{V}, I_C=50\text{mA},$		0.25		μs
Turn-OFF Time	t_{off}	$I_{B1}=-I_{B2}=5\text{mA}$		5		μs

CLASSIFICATION OF $h_{FE(1)}$

Rank	D	E
Range	60-120	100-200
Marking	CN	