

2SC4548

TRANSISTOR (NPN)

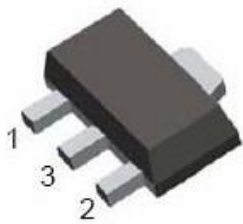
Features

- Small Flat Package
- High Breakdown Voltage
- Excellent hFE Linearity
- RoHS compliant package
- Case : SOT-89-3L

Marking : BQ, BR, BS

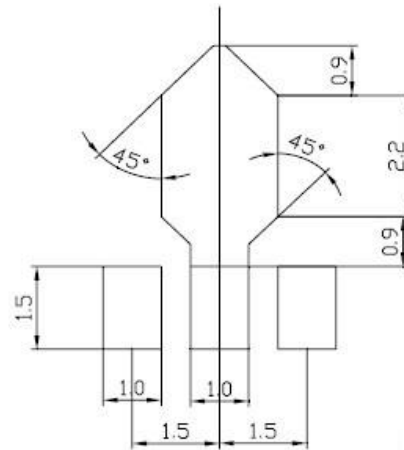
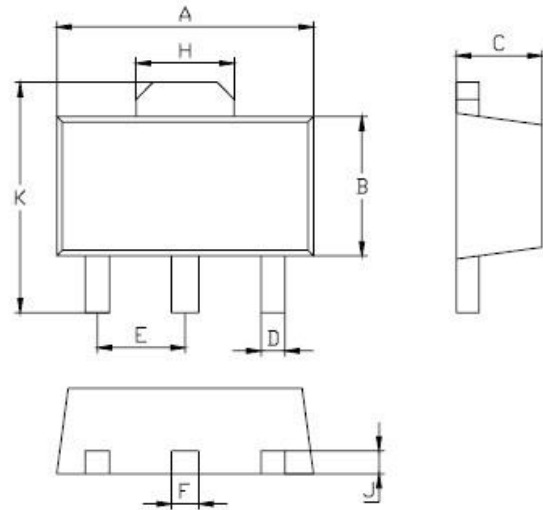
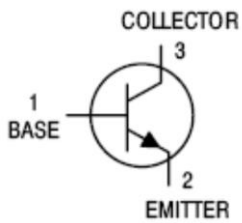
Packing & Order Information

2,500/Reel



**RoHS
COMPLIANT**

Graphic symbol



SOT-89		
Dim	Min	Max
A	4.5	4.7
B	2.3	2.7
C	1.5Typical	
D	0.35	0.55
E	1.4	1.6
F	0.4	0.6
H	1.55	1.75
J	0.4Typical	
K	4.15	4.25
All Dimensions in mm		

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	400	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	200	mA
P _C	Collector Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Symbol	Parameter	Test Conditions	MIN	TYP	MAX	UNIT
V _{(BR)CBO}	Collector-base breakdown voltage	I _C = 10μA , I _E = 0	400			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C = 1 mA , I _B = 0	400			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E = 10μA , I _C = 0	5			V
I _{CBO}	Collector cut-off current	V _{CB} = 300 V , I _E = 0			0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} = 4 V , I _C = 0			0.1	μA
h _{FE}	DC current gain	V _{CE} = 10 V , I _C = 50 mA	60		200	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C = 50 mA , I _B = 5 mA			0.6	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C = 50 mA , I _B = 5 mA			1	V
f _T	Transition frequency	V _{CE} = 30 V , I _C = 10 mA		70		MHz
C _{ob}	Collector output capacitance	V _{CB} = 30 V , I _E = 0 f = 1.0MHz		4		pF

CLASSIFICATION OF h_{FE}

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

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<p>Fig 1 Grounded emitter propagation characteristics</p>	<p>Fig 2 Grounded emitter output characteristics (I)</p>
<p>Fig 3 Grounded emitter output characteristics (II)</p>	<p>Fig 4 Collector-emitter saturation voltage vs. collector current</p>
<p>Fig 5 Gain bandwidth product vs. emitter current</p>	<p>Fig 6 Base-collector time constant vs. emitter current</p>

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