

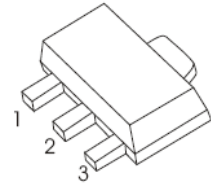
TRANSISTOR (NPN)

FEATURES

- High Current
- Low Voltage
- General Purpose Amplifier Applications

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



MARKING:879

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	30	V
V _{CEO}	Collector-Emitter Voltage	10	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current	3	A
P _C	Collector Power Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	30			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	10			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =20V, I _E =0			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			100	nA
DC current gain	h _{FE}	V _{CE} =2V, I _C =3A	140			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =3A, I _B =60mA			0.4	V
Base-emitter voltage	V _{BE}	V _{CE} =1V, I _C =2A			1.5	V
Transition frequency	f _T	V _{CE} =10V, I _C =50mA		200		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1KHz		30		pF