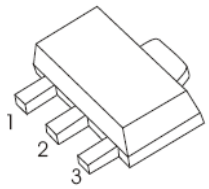
TRANSISTOR (NPN)

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Low Voltage
- High Current
- Integrated Diode and Resistor

APPLICATIONS

- Industrial Switching Applications: Print Hammer, Solenoid, Relay and Lamp Driving

MARKING:AS3

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	90	V
V_{CEO}	Collector-Emitter Voltage	80	V
I_C	Collector Current	500	mA
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	90			V
Collector-emitter sustain voltage	V_{CES}	V_{BE}=0,I_C=100μA	80			V
Collector cut-off current	I_{CES}	V_{BE}=0, V_{CE}=80V			50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			50	nA
DC current gain	h_{FE}	V_{CE}=10V, I_C=150mA	1000			
		V_{CE}=10V, I_C=500mA	2000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA,I_B=0.5mA			1.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA,I_B=0.5mA			1.9	V
Transition frequency	f_T	V_{CE}=5V,I_C=500mA, f=100MHz		200		MHz