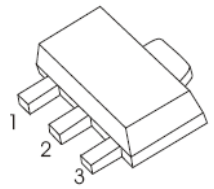
TRANSISTOR (NPN)

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Small Flat Package
- High Transition Frequency
- High Voltage
- Complementary to 2SA1201

APPLICATIONS

- Power Amplifier and Voltage Amplifier

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	800	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=1mA,I_E=0	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=5V, I_C=100mA	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA,I_B=50mA			1	V
Base-emitter voltage	V_{BE}	V_{CE}=5V, I_C=0.5A			1	V
Transition frequency	f_T	V_{CE}=5V,I_C=100mA		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz			30	pF

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	80 – 160	120 – 240
MARKING	CO1	CY1