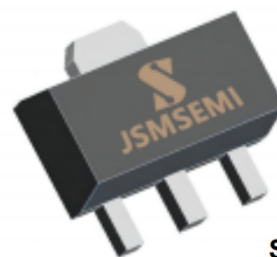


FEATURES

- Small Flat Package
- High Current Application
- High Voltage
- High Transition Frequency


SOT-89

1.BASE

2.COLLECTOR

3.EMITTER

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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	-0.8	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

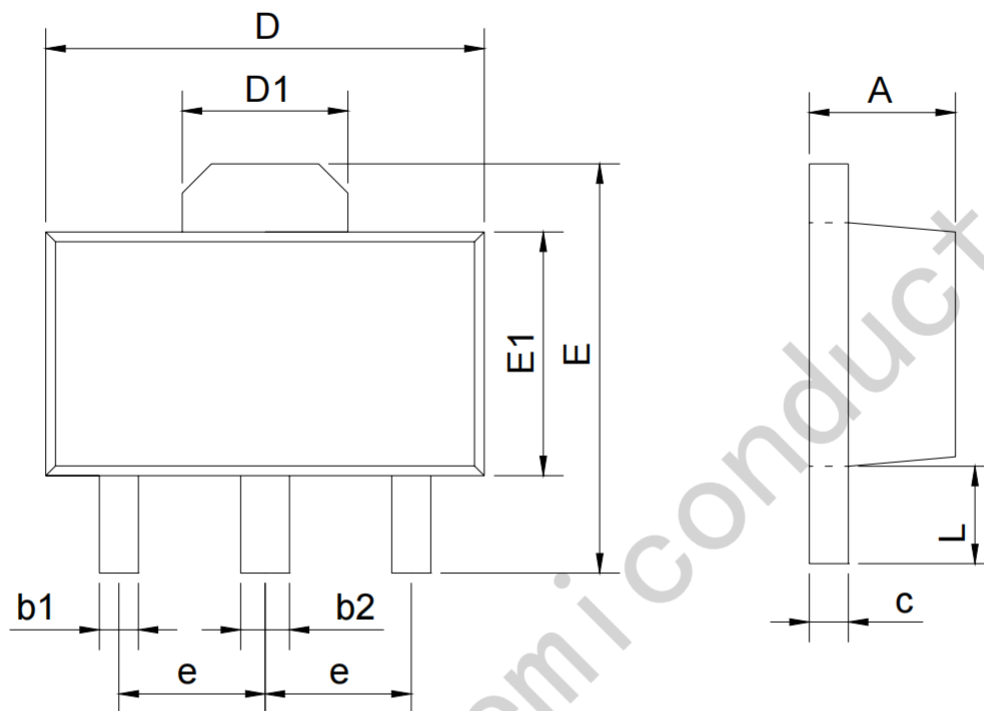
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-5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

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	80 - 160	120 - 240

Package Information

SOT-89



SYMBOL	mm	
	min	max
A	1.40	1.60
b1	0.35	0.50
b2	0.45	0.60
c	0.36	0.46
D	4.30	4.70
D1	1.40	1.80
E	4.00	4.40
E1	2.30	2.70
e	1.50BSC	
L	0.80	1.20