

FEATURES

Power dissipation

 P_{CM} : 500 mW ($T_{amb}=25^{\circ}C$)

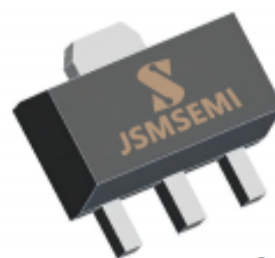
Collector current

 I_{CM} : -3 A

Collector-base voltage

 $V_{(BR)CBO}$: -40 V

Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)
CLASSIFICATION OF $h_{FE(1)}$

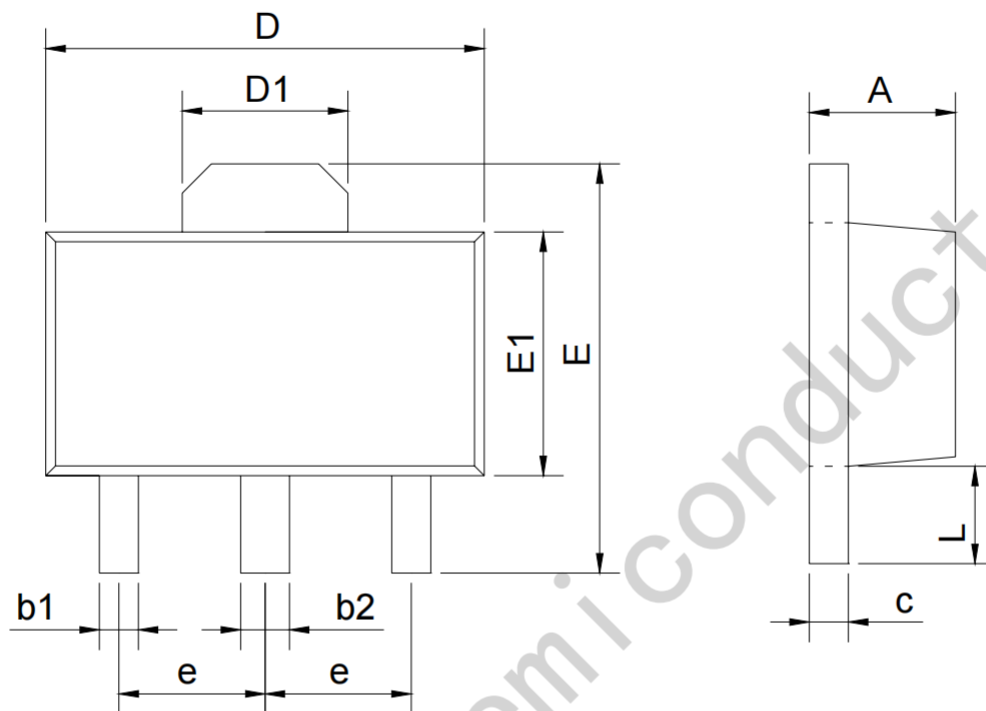
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10 mA, I_B=0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100 \mu A, I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-40 V, I_E=0$			-1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-30 V, I_B=0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6V, I_C=0$			-1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2V, I_C=-1A$	60		400	
	$h_{FE(2)}$	$V_{CE}=-2V, I_C=-100mA$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2A, I_B=-0.2A$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-2A, I_B=-0.2A$			-1.5	V
Transition frequency	f_T	$V_{CE}=-5V, I_C=-0.1A$ $f = 10MHz$	50			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

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