

Features

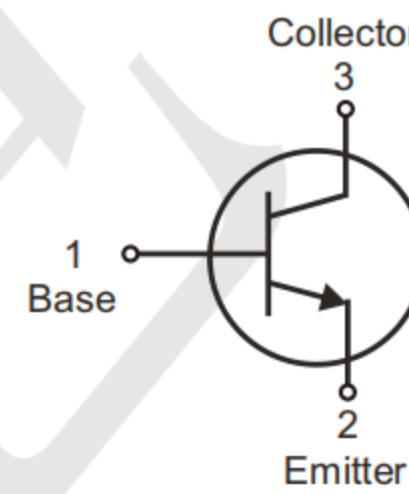
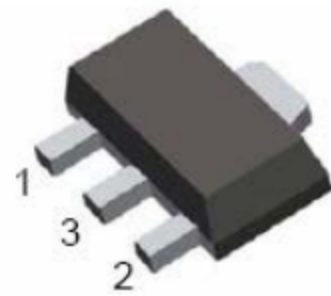
- High current
- Low voltage

Ordering Information

- Shipping Qty:1000 /7inch Tape& Reel

Circuit Diagram

SOT-89



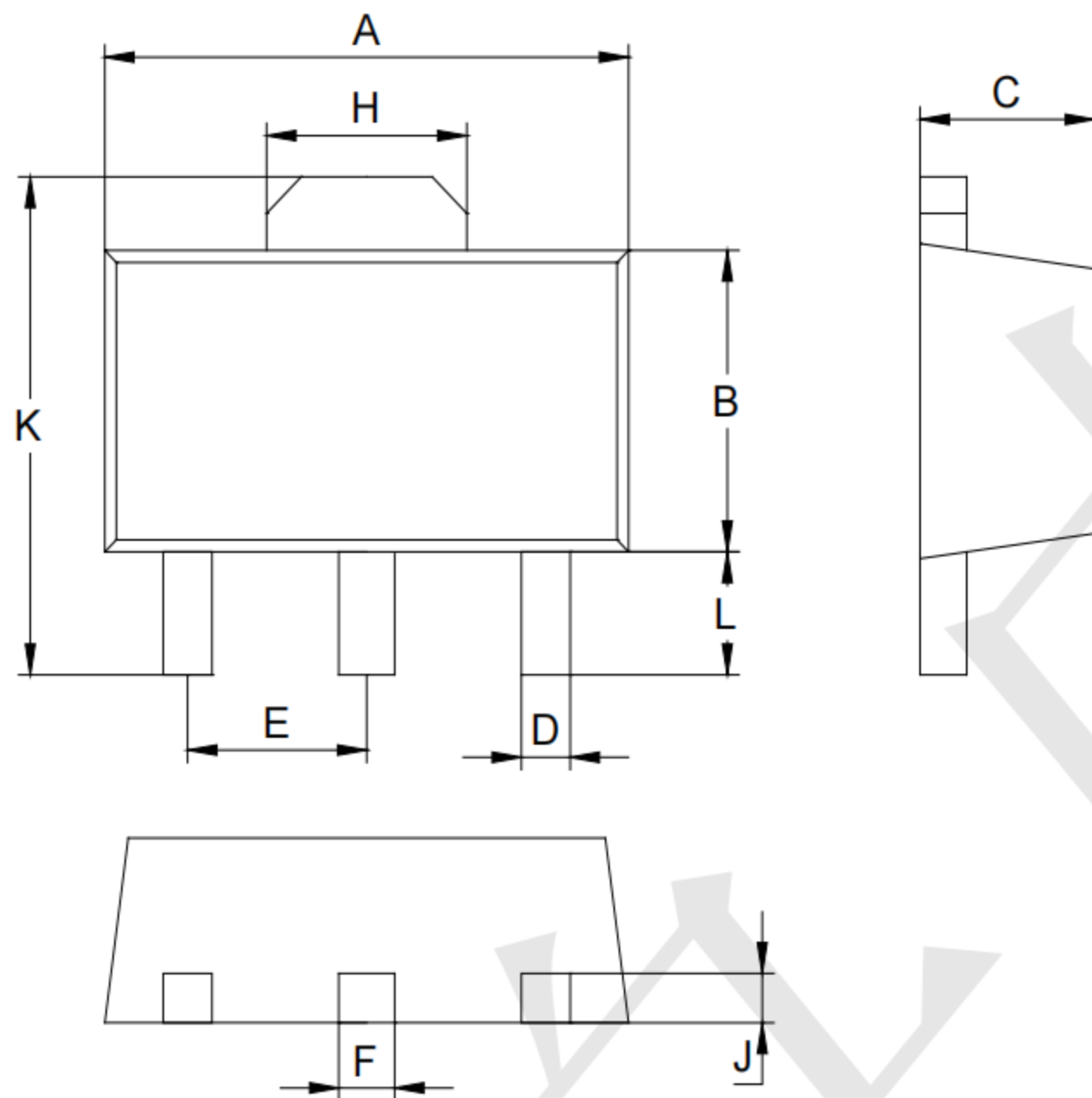
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	75	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	600	mA
I_{CM}	Peak Collector Current	800	mA
I_{BM}	Peak Base Current	200	mA
P_D	Total Power Dissipation	1.25	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-65 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

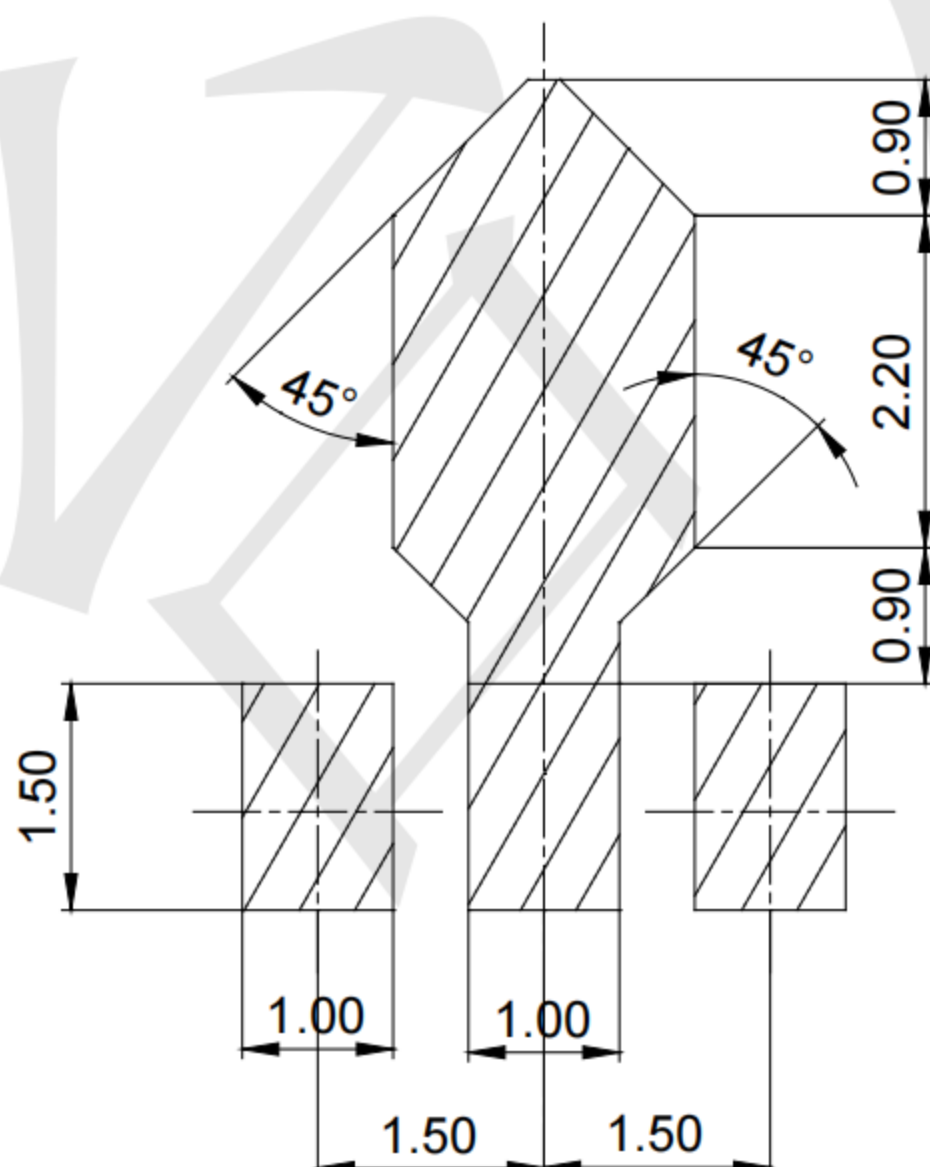
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	75		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$		10	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$		10	nA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=0.1mA$ $V_{CE}=10V, I_C=1mA$ $V_{CE}=10V, I_C=10mA$ $V_{CE}=1V, I_C=150mA$ $V_{CE}=10V, I_C=150mA$ $V_{CE}=10V, I_C=500mA$	35 50 75 50 100 40	300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=150mA, I_B=15mA$ $I_C=500mA, I_B=50mA$		0.3 1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=150mA, I_B=15mA$ $I_C=500mA, I_B=50mA$	0.6	1.2 2	V
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA,$ $f=100MHz$	300		MHz
Collector Capacitance	C_c	$V_{CB}=10V, f=1MHz, I_E=0$		8	pF
Emitter Capacitance	C_e	$V_{EB}=10V, f=1MHz, I_C=0$		25	pF
Noise Figure	F	$I_C=200\mu A, V_{CE}=5V, R_S=2k\Omega$ $F=1kHz, B=200Hz$		4	dB

Outline Drawing - SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

Land Pattern - SOT-89



Unit: mm