

Features

- High current
- Low voltage

Applications

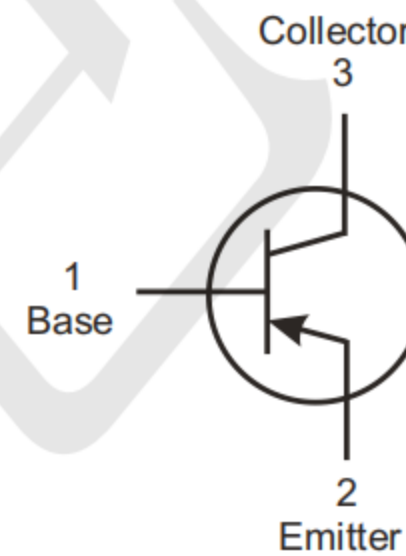
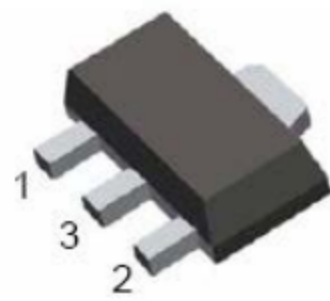
- Switching and linear amplification

Ordering Information

- Shipping Qty:1000 /7inch Tape& Reel

Circuit Diagram

SOT-89



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

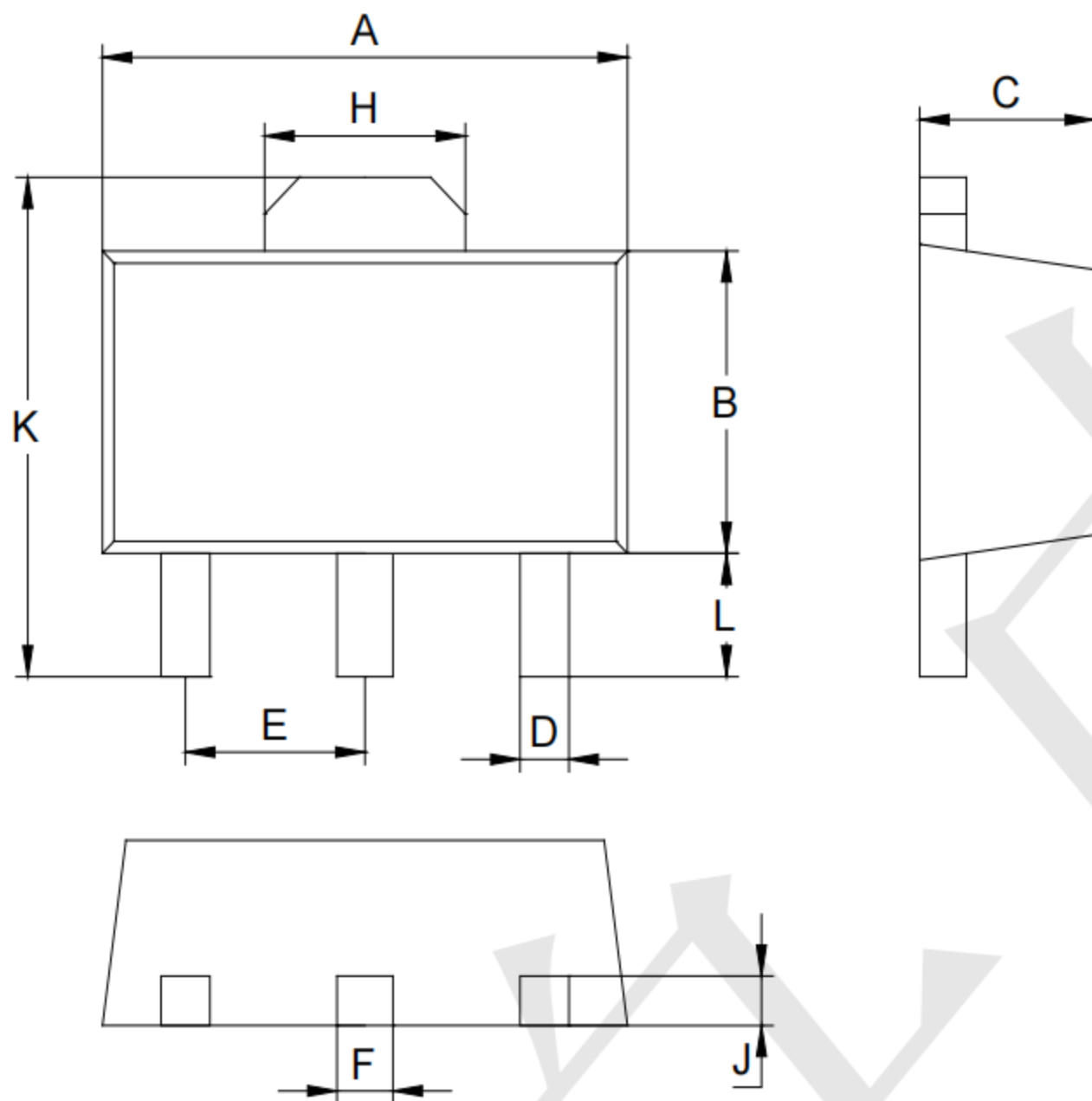
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-600	mA
I_{CM}	Peak Collector Current	-800	mA
I_{BM}	Peak Base Current	-200	mA
P_D	Total Device Dissipation	1.3	W
T_J, T_{STG}	Junction and Storage Temperature	-65 to +150	°C

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

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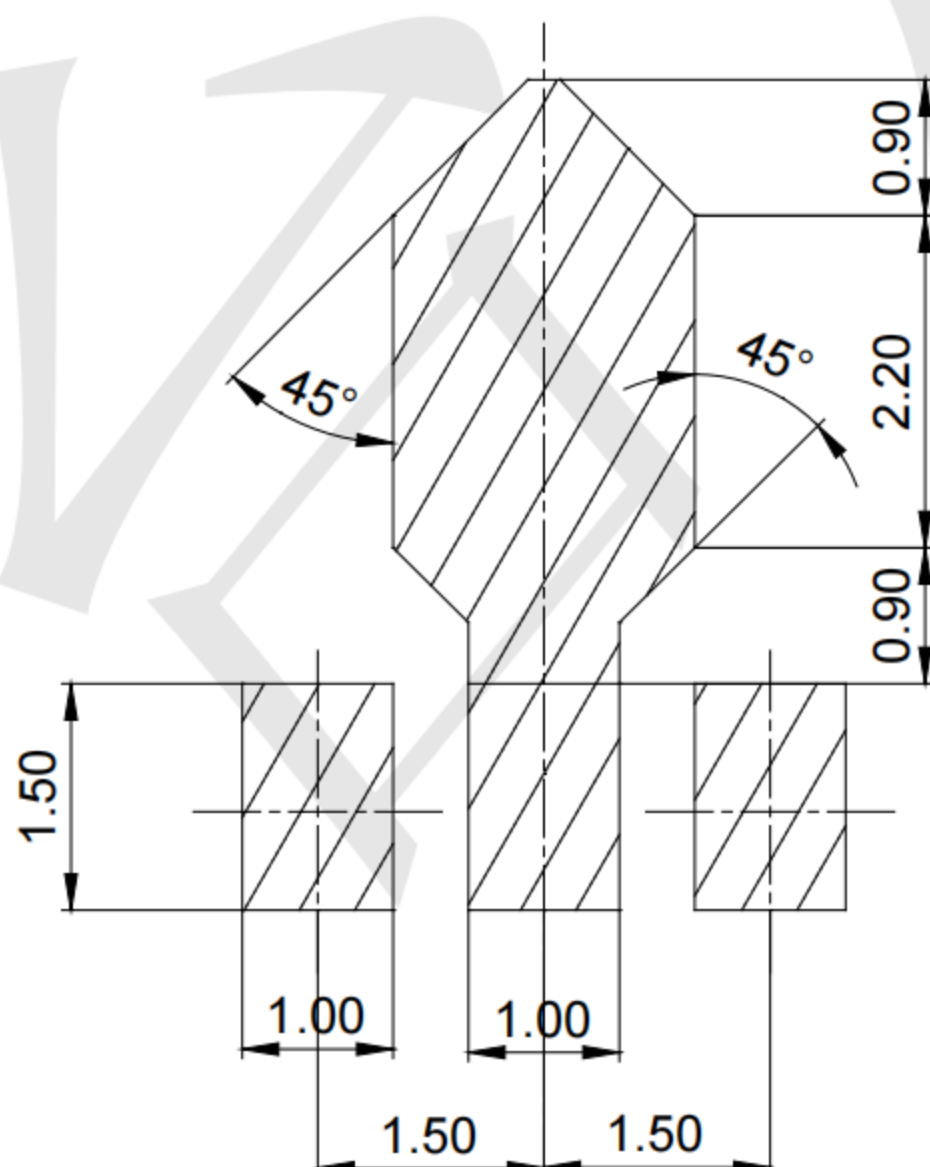
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A$ $I_E = 0$	-60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA$ $I_B = 0$	-60		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A$ $I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -50V$ $I_E = 0$		-10	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$		-50	nA
DC current gain	h_{FE}	$V_{CE} = -1V$ $I_C = -100\mu A$	75	-	
		$V_{CE} = -1V$ $I_C = -1mA$	100	-	
		$V_{CE} = -1V$ $I_C = -10mA$	100	-	
		$V_{CE} = -2V$ $I_C = -150mA$	100	300	
		$V_{CE} = -10V$ $I_C = -500mA$	50	-	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150mA$ $I_B = -15mA$ $I_C = -500mA$ $I_B = -50mA$		-0.4 -1.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150mA$ $I_B = -15mA$ $I_C = -500mA$ $I_B = -50mA$		-1.3 -2.6	V
Transition frequency	f_T	$V_{CE} = -10V$, $I_C = -20mA$, $f = 100MHz$	200		MHz
Collector Capacitance	C_C	$V_{CB} = -10V$ $f = 1.0MHz$ $I_E = 0$	-	8	pF
Emitter Capacitance	C_e	$V_{EB} = -0.5V$ $f = 1.0MHz$ $I_C = 0$	-	35	pF
Delay time	t_d	$I_{Con} = -150mA$, $I_{Bon} = -15mA$ $I_{Boff} = -15mA$		12	ns
Rise time	t_r			30	ns
Storage time	t_s			300	ns
Fall time	t_f			65	ns

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