

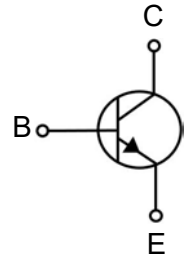
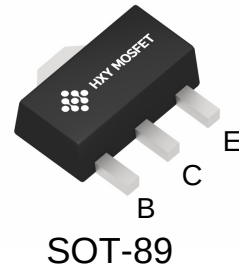


Features

IC = 5A Continuous Collector Current
500mW Power Dissipation

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
PBSS4520X	SOT-89	AHR	1000



Maximum Ratings (Ta=25°C unless otherwise noted)

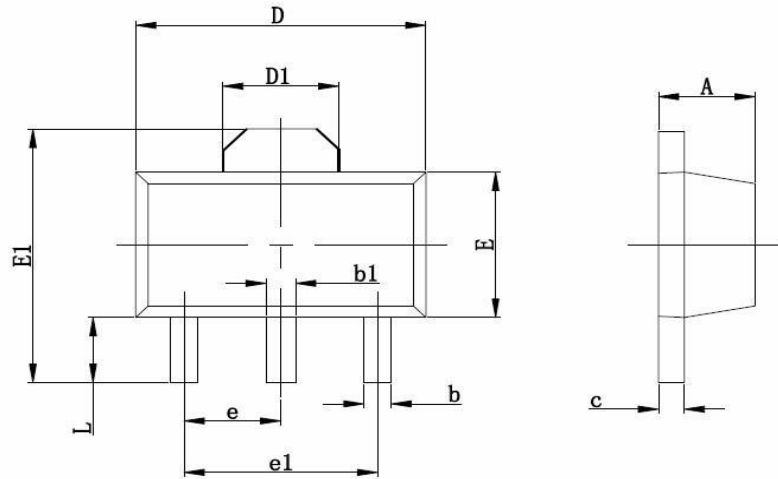
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	5	A
P_C	Collector Power Dissipation	500	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=40V, I_E=0$			0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.5	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=0.5A$	180		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=4A, I_B=100mA$			1	V
Transition frequency	f_T	$V_{CE}=6V, I_C=50mA, f=100MHz$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB}=20V, I_E=0, f=1MHz$		30		pF



SOT-89 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047



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