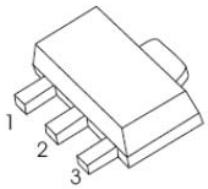
GOOD-ARK
SEMICONDUCTOR

GSBF620
NPN Transistor

Features

- Low Current (Max. 50mA)
- High Voltage (Max. 300V)
- Video Output Stages



SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER

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

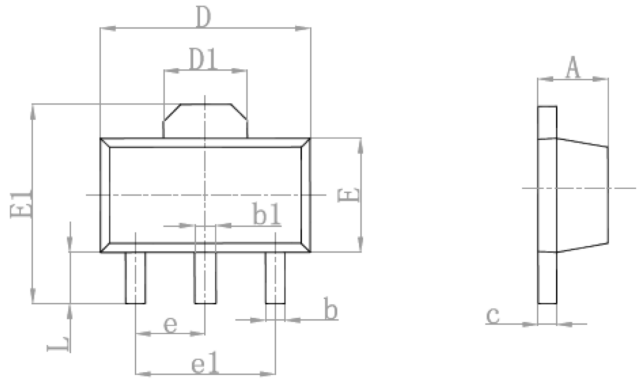
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	50	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	300	--	--	V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	300	--	--	V
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	5	--	--	V
Collector Cut-off Current	I_{CBO}	V_{CB}=200V, 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}=20V, I_C=25mA	50	--	--	--
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=30mA, I_B=5mA	--	--	0.6	V
Transition Frequency	f_T	V_{CE}=10V, I_C=10mA, f=100MHz	60	--	--	MHz

Package Outline Dimensions

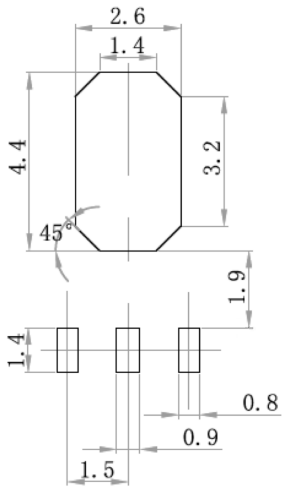
SOT-89-3L



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

Suggested Pad Layout

SOT-89-3L



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.