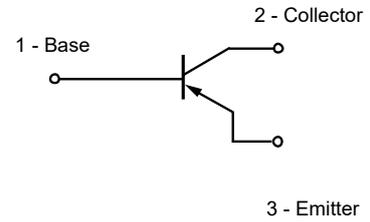


Feature

- This device is Pb-Free and RoHS compliant.
- PNP epitaxial planar silicon transistor


Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- Pin flatness : ≤3mil

Absolute maximum rating@25°C

Parameter	Symbol	Value	Units
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-20	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-30	V
Emitter -Base Breakdown Voltage	$V_{(BR)EBO}$	-6	V
Collector Current	I_C	-5	A
	$I_C(\text{Pulse})$	-10	A
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$	-1	V
Collector power dissipation	P_C	3	W

Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1.0mA, I_B=0$	-20			V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-50\mu A, I_E=0$	-30			V
Emitter -Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-50\mu A, I_C=0$	-6.0			V
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-5V$			-500	nA
Collector Cutoff Current	I_{CBO}	$V_{CB}=-20V$			-500	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-4A, I_B=-100mA$	-	-0.3	-1	V
Transition frequency	f_T	$V_{CE}=-6V, I_E=50mA, f=100MHz$		120		MHz
Output capacitance	C_o	$V_{CB}=-20V, I_E=0A, f=1MHz$		60		pF
DC Current gain	h_{FE}	$V_{CE}=-2V, I_C=-0.5A$	100		400	

Typical Characteristics

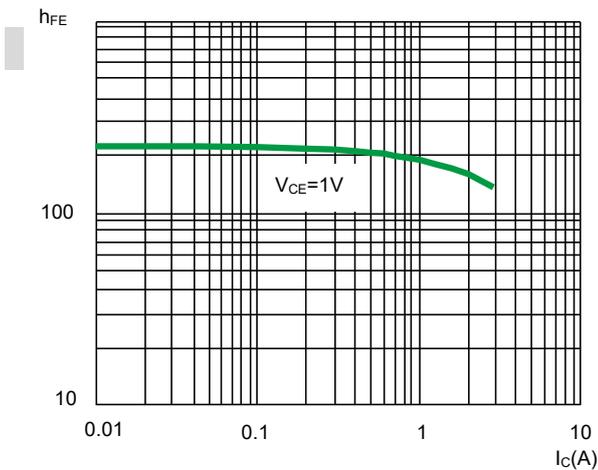


Fig1.DC Current Gain

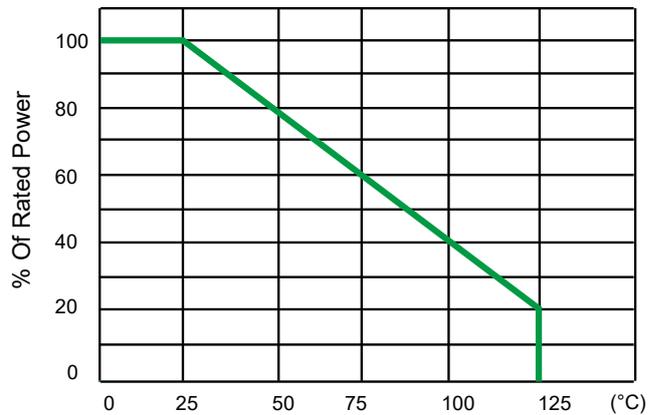


Fig2. Power Derating Curve

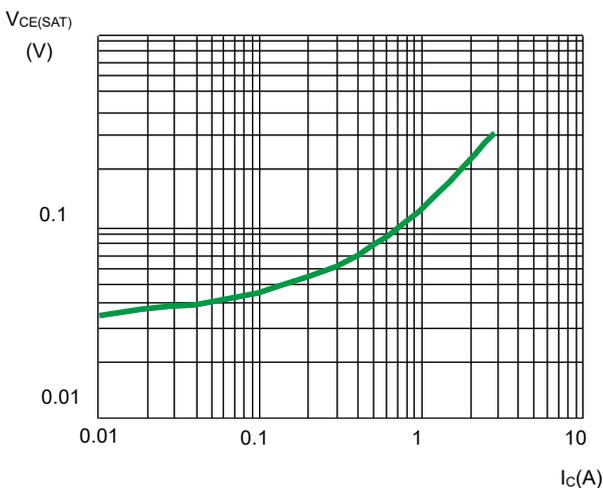


Fig 3.Collector-Emitter Saturation Voltage

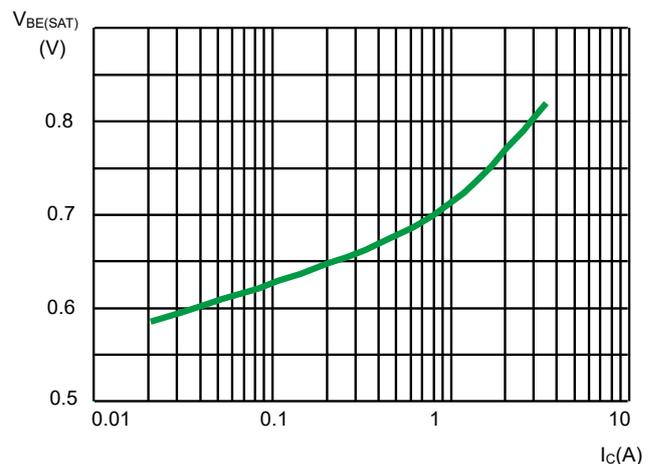
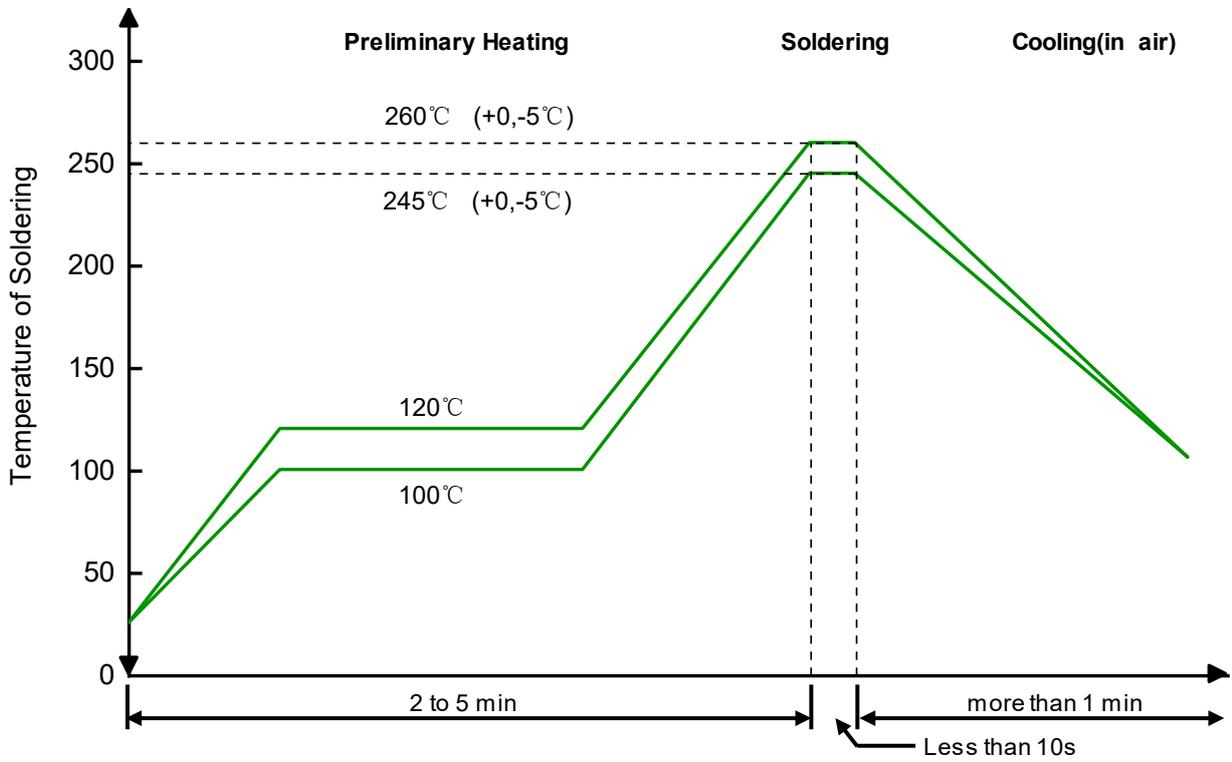


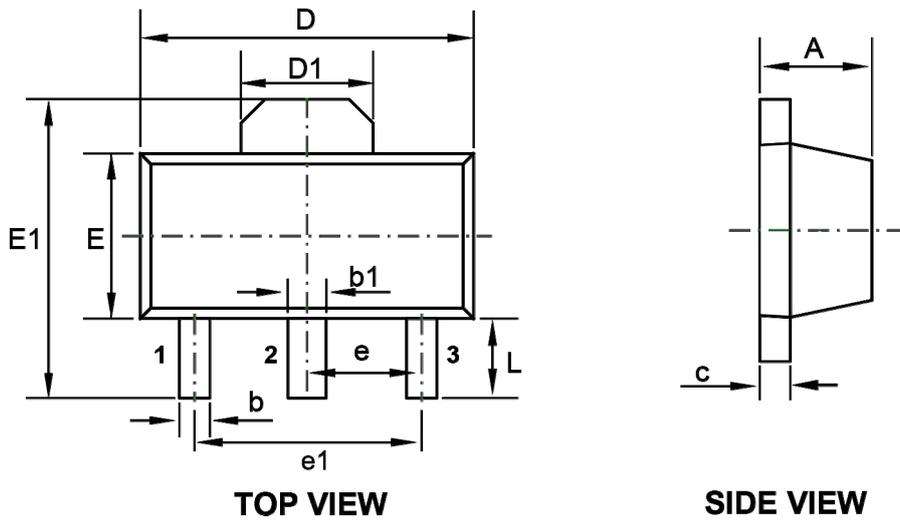
Fig4. Base-Emitter Saturation Voltage

Solder Reflow Recommendation

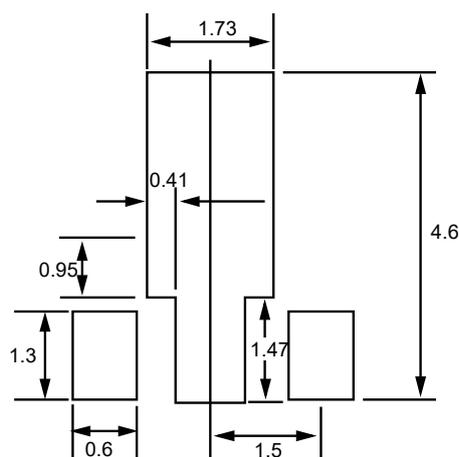


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension (SOT-89-3L)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.055	0.067	1.40	1.70
b	0.012	0.020	0.30	0.52
b1	0.014	0.023	0.36	0.58
c	0.012	0.020	0.30	0.50
D	0.173	0.185	4.40	4.70
D1	0.063 Ref.		1.60 Ref.	
E	0.091	0.104	2.30	2.65
E1	0.152	0.176	3.87	4.48
e	0.059 Typ.		1.50 Typ.	
e1	0.118 Typ.		3.00 Typ.	
L	0.031	0.047	0.80	1.20



Ordering information

Device	Package	Shipping
PPT89T30V5AE2M	SOT-89-3L (Pb-Free)	1000 / Tape & Reel

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