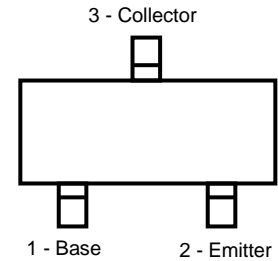


Feature

This device is Pb-Free, Halogen Free/BFR Free and RoHS compliant.

- Package: SOT-323
- Emitter -Base Breakdown Voltage 5V
- 0.1A continuous collector current
- NPN switch transistor



Top View

Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements

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

Parameter	Symbol	Value	Unit
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	65	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	80	V
Emitter -Base Breakdown Voltage	$V_{(BR)EBO}$	5	V
Collector Current	I_C	100	mA
Total Dissipation @25°C	P_{tot}	0.15	W
Storage Temperature	T_{STG}	-65~150	°C
Max. Operating Junction Temperature	T_J	150	°C

Absolute maximum rating @25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A$	80			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=100\mu A$	65			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu A$	5			V
Collector Cut-off Current ($I_E=0$)	I_{CBO}	$V_{CB}=30V$			15	nA
Emitter Cut-off Current ($I_C=0$)	I_{EBO}	$V_{EB}=5V$			100	nA
DC Current Gain	h_{FE}	$I_C=2mA, V_{CE}=5V$	200		450	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-		150	mV
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=5mA$	-		300	mV
Collector Capacitance	C_C	$V_{CB}=10V, f=1MHz$		3.6	5	pF

Typical Characteristics

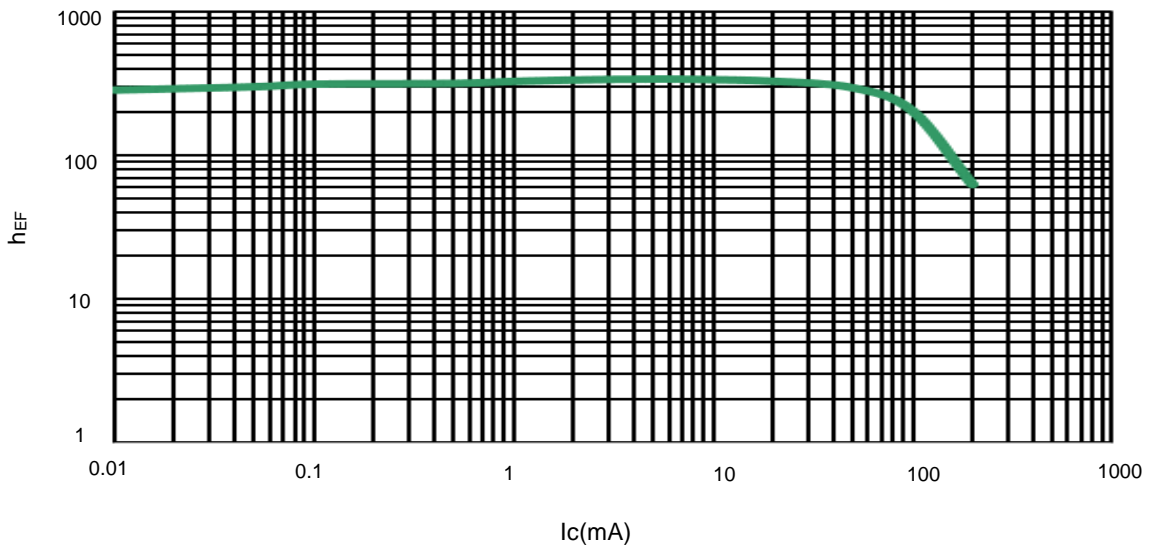
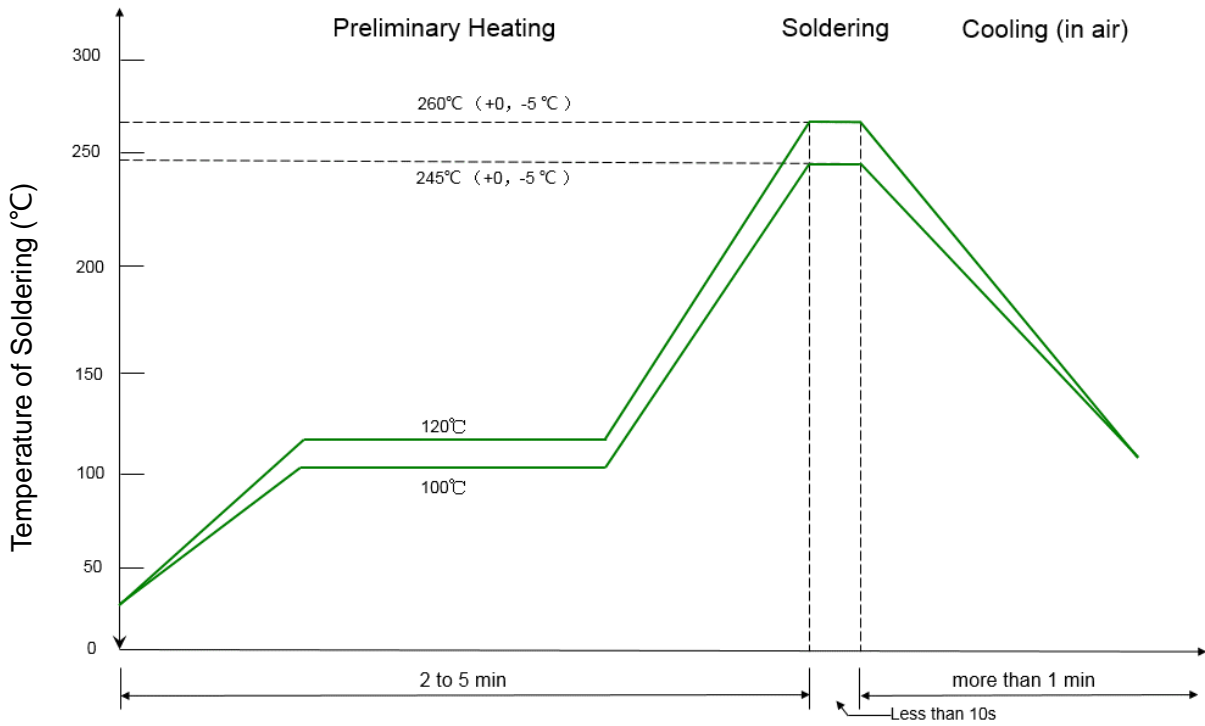


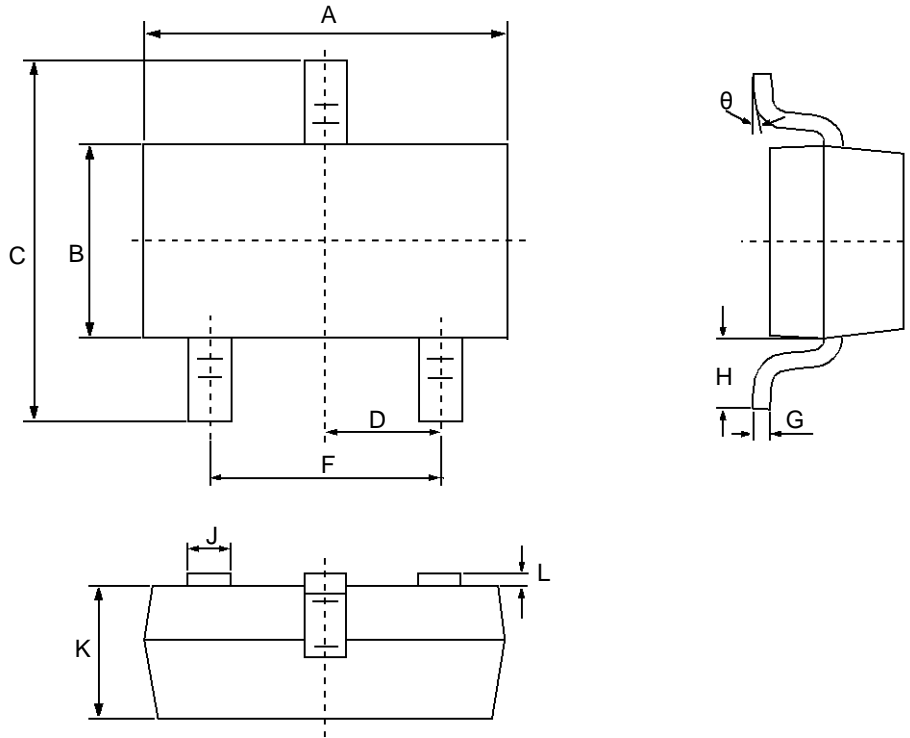
Fig 1.DC Current Gain

Solder Reflow Recommendation

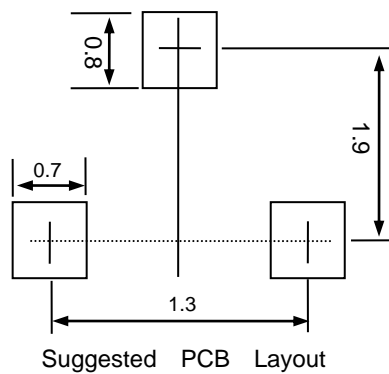


Remark: Pb free for 260°C; Pb for 245°C.

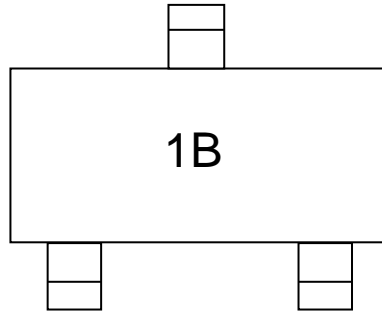
Product dimension (SOT-323)



Dim	Millimeters	
	MIN	MAX
A	1.80	2.20
B	1.15	1.35
C	2.00	2.45
D	0.65BSC	
F	1.20	1.40
G	0.05	0.25
H	0.525REF	
J	0.20	0.40
K	0.80	1.10
L	0.00	0.10
θ	0°	10°



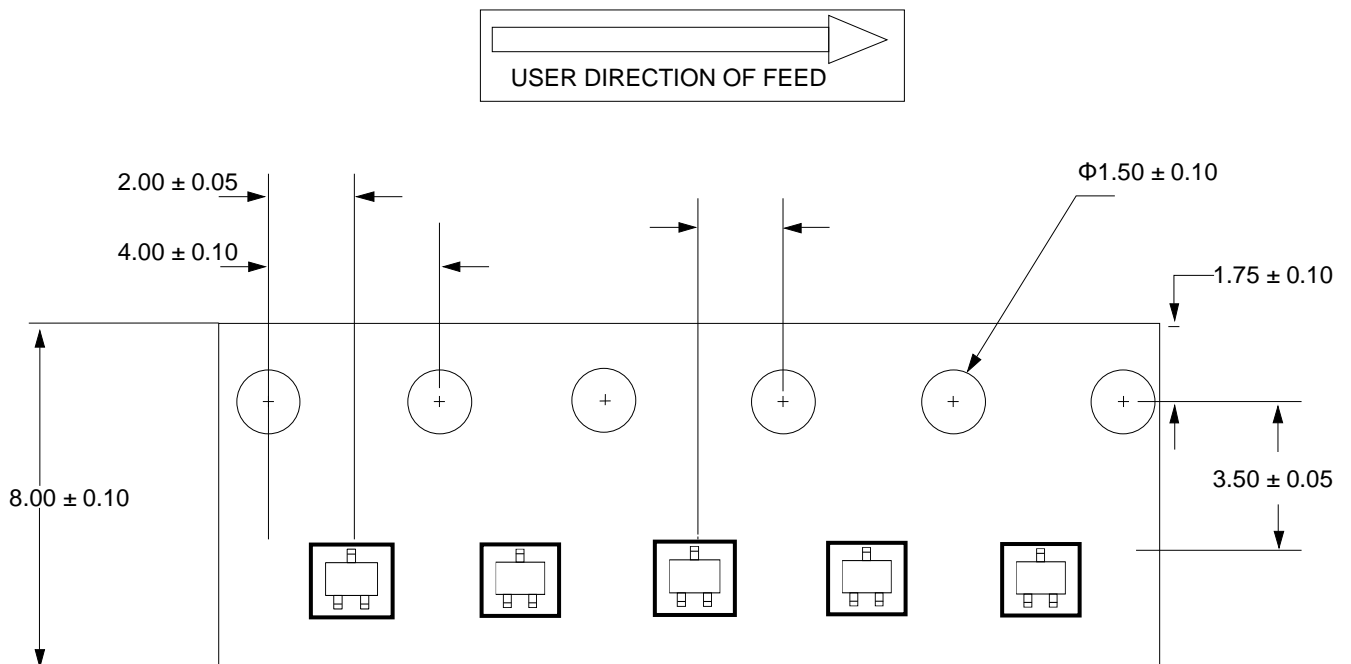
Marking information




Ordering information

Device	Package	Reel	MPQ
PNT323T80V01	SOT-323 (Pb-Free)	7"	3000 / Tape & Reel

Load with information




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