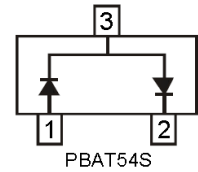
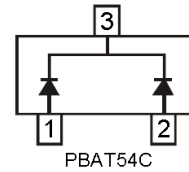
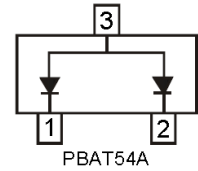
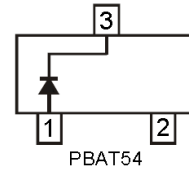


**Features**

- Low Forward Voltage
- High Current Capability
- Extremely Fast Switching Speed

**Applications**

- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Blocking diodes.


**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

**Electrical characteristics per line@25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Maximum forward voltage	VF1			500	mV	I <sub>F</sub> =30mA
	VF2			1000	mV	I <sub>F</sub> =100mA
Maximum reverse breakdown voltage	VR	30			V	IR=100uA
Maximum reverse current	IR			2.0	uA	VR=25V
Reverse recovery time	trr			5	nS	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1XIR, RL=100Ω
Junction Capacitance	C <sub>J</sub>		18	30	pF	V <sub>R</sub> =0V f = 1MHZ

Absolute maximum rating@25°C

Parameter	Symbol	limit	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	30	V
Maximum RMS voltage	$V_{RMS}$	21	V
Maximum DC blocking voltage	$V_{DC}$	30	V
Maximum average forward rectified current	$I_{FM}$	200	mA
Peak forward surge current 8.3ms single half sine-wave	$I_{FSM}$	600	mA
Typical thermal resistance	$R_{\theta JA}$	500	°C/W
Powe Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	125	°C
Storage temperature range	$T_{STG}$	-50~+150	°C

Typical Characteristics

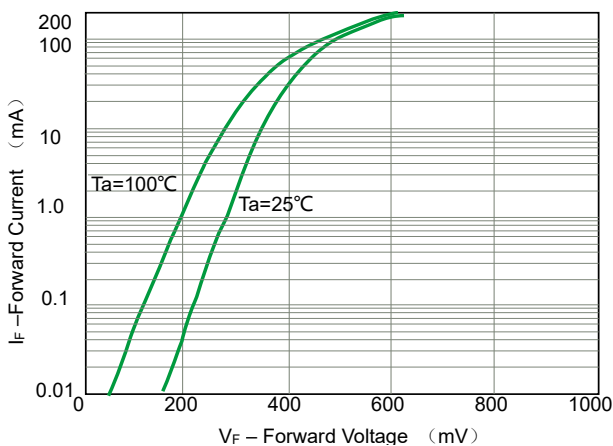


Fig 1. Forward Characteristics

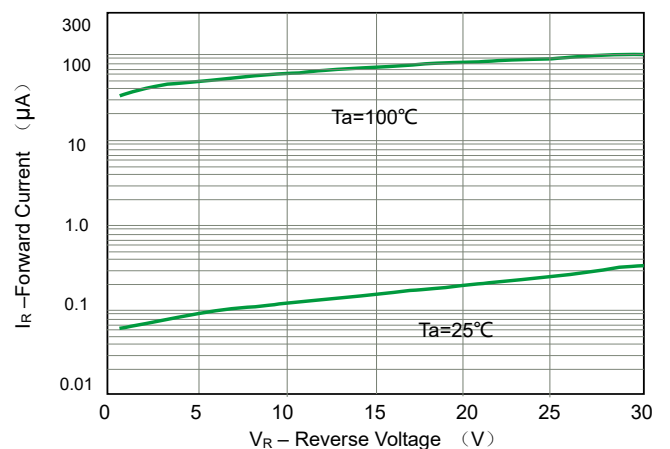


Fig 2. Reverse Characteristics

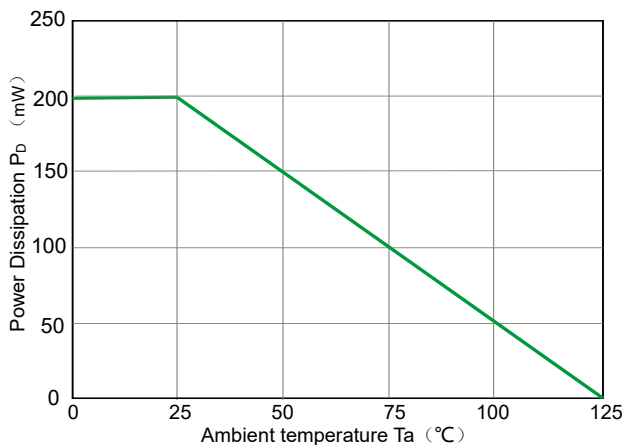


Fig 3. Power Derating Curve

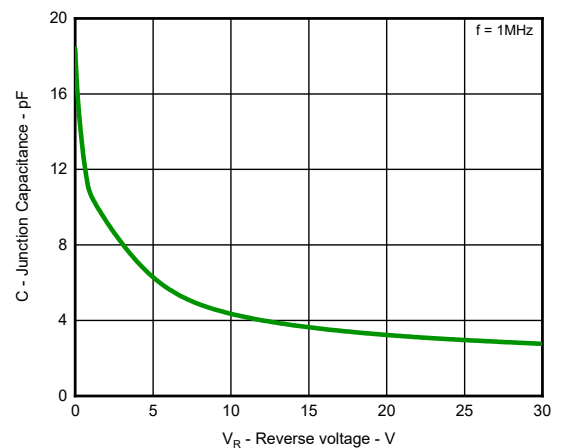
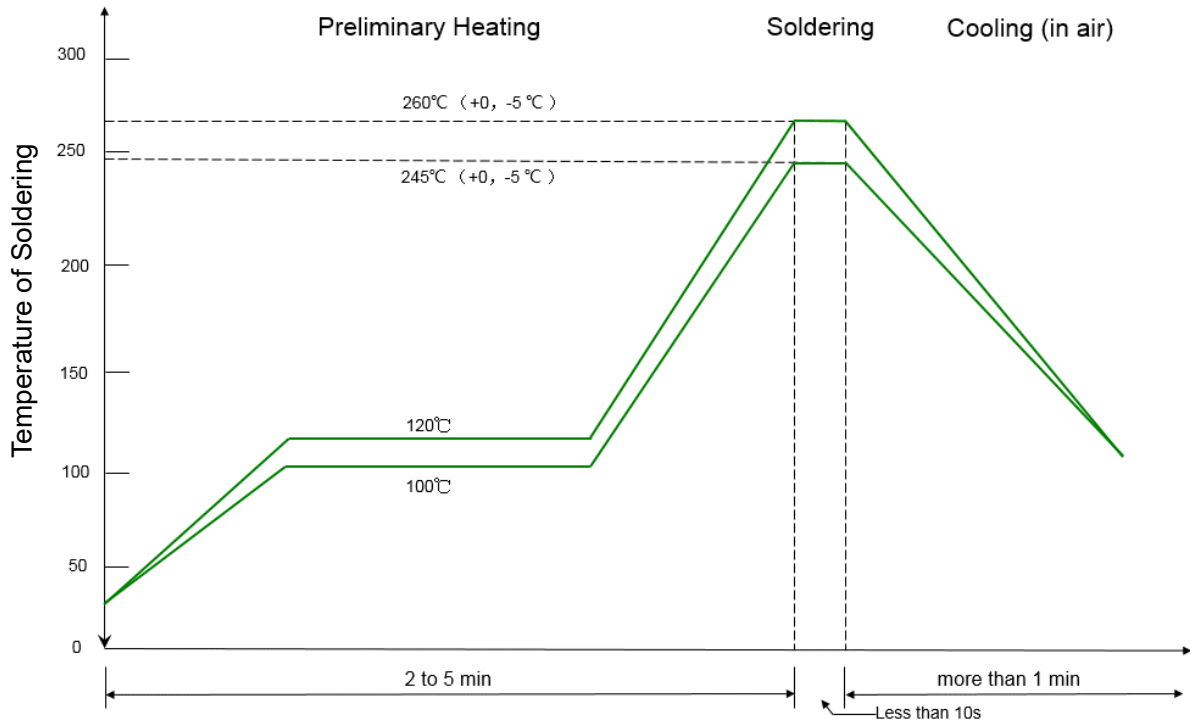


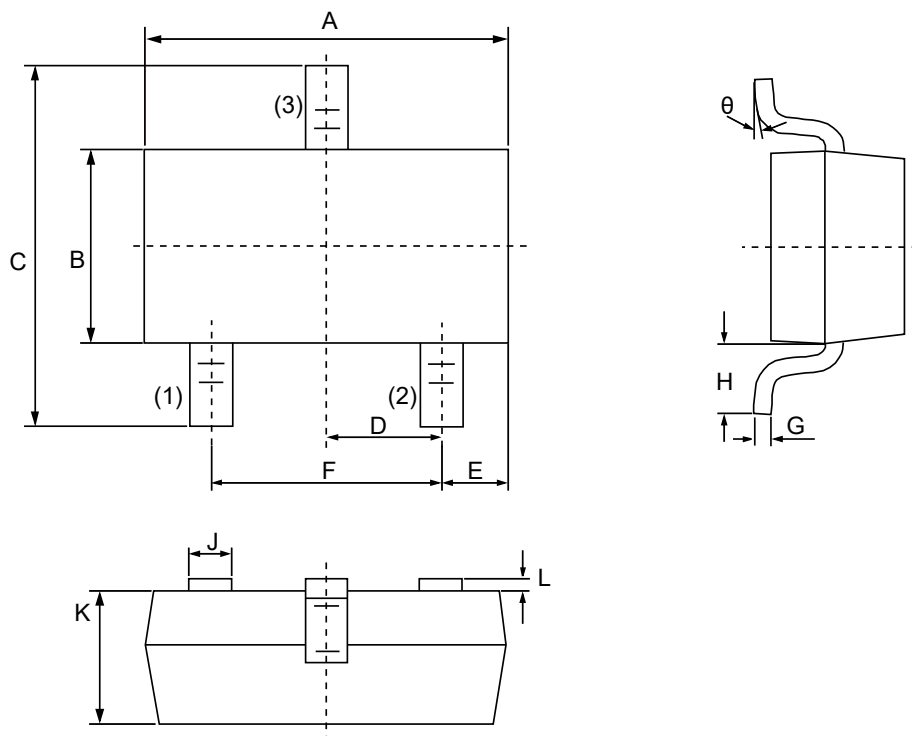
Fig 4. Capacitance vs. Reverse voltage

Solder Reflow Recommendation

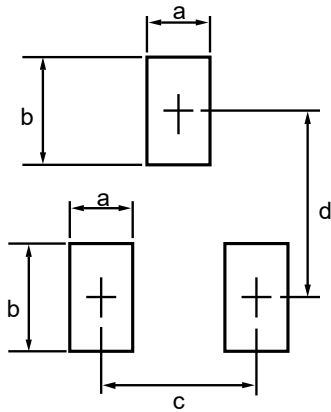


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension(SOT-23)




Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	2.80	3.00	0.110	0.118
B	1.20	1.40	0.047	0.055
C	2.25	2.55	0.089	0.100
D	0.95 Typ.		0.037 Typ.	
E	0.40	0.60	0.016	0.024
F	1.80	2.00	0.071	0.079
G	0.08	0.15	0.003	0.006
H	0.55 Ref.		0.022 Ref.	
J	0.30	0.50	0.012	0.020
K	0.90	1.05	0.035	0.041
L	0.00	0.10	0.000	0.004
$\theta$	0°	8°	0°	8°



Dim	Millimeters	
	MIN	MAX
a	--	0.7
b	--	1.2
c	--	2.0
d	--	2.2


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