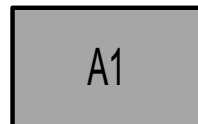
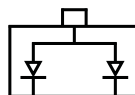
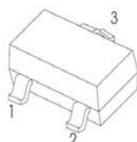


FEATURES

- Fast switching speed.
- For general purpose switching applications.
- High conductance.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS(Ta = 25°C)

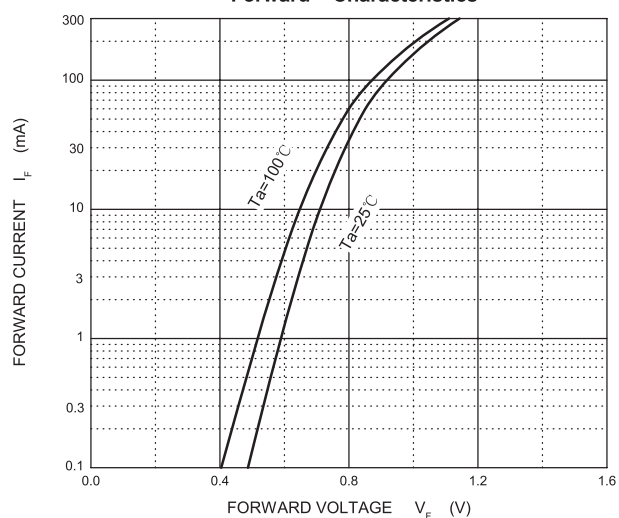
Symbol	Parameter	Value	Unit
V _R	Reverse Voltage	100	V
I _F	Forward Current	0.2	A
I _{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2	A
P _D	Total Device Dissipation	0.225	W
R _{θJA}	Thermal Resistance Form Junction to Ambient	556	°C/W
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta= 25°C)

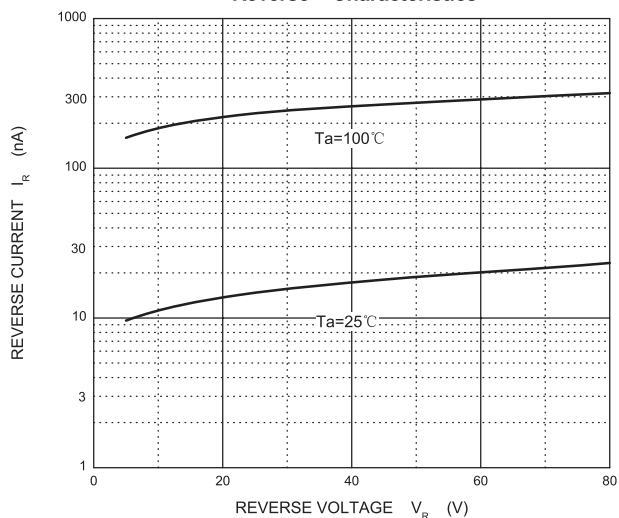
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse breakdown voltage	V _(BR)	I _R =100uA	100			V
Forward voltage	V _{F2}	I _F =1mA			0.715	V
	V _{F3}	I _F =10mA			0.855	V
	V _{F4}	I _F =50mA			1	V
	V _{F5}	I _F =150mA			1.25	V
Reverse current	I _R	V _R =25V			2.5	uA
Diode capacitance	C _T	V _R =1V,f=1MHz			1.5	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, I _{RR} =0.1xI _R ,R _L =100Ω			6	nS

RATING AND CHARACTERISTIC CURVES

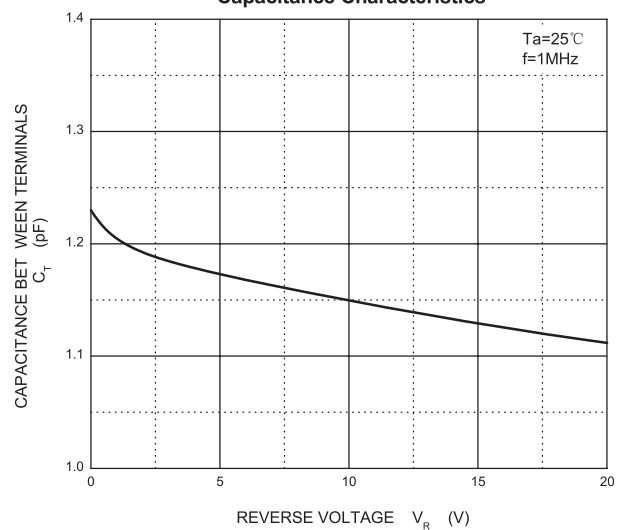
Forward Characteristics



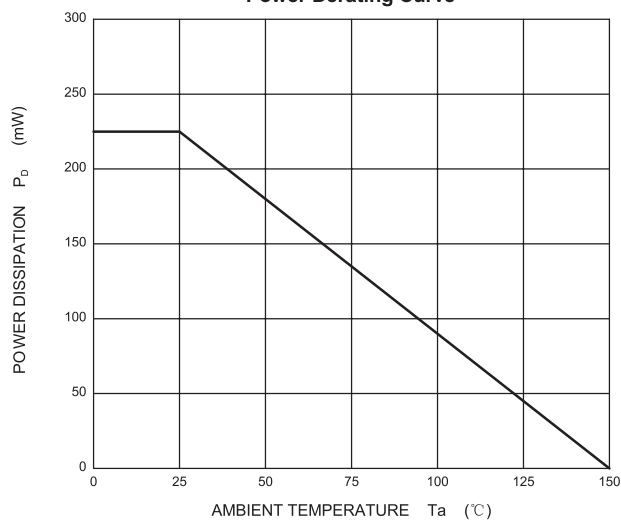
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



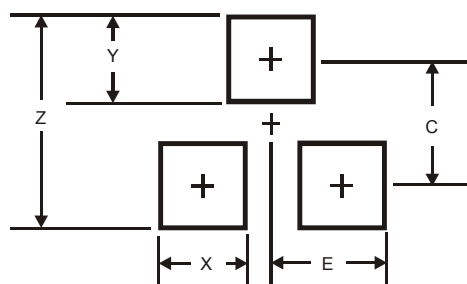
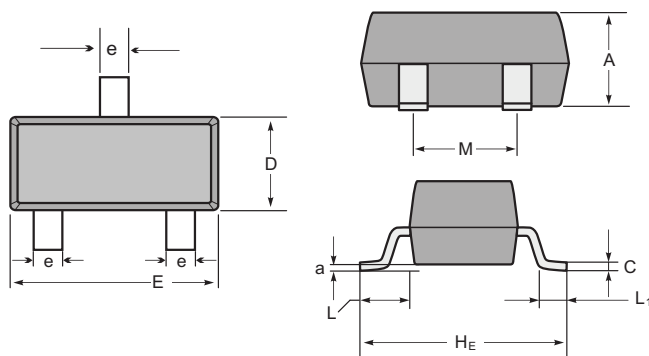
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C



Package Dimensions & Suggested Pad Layout

SOT23

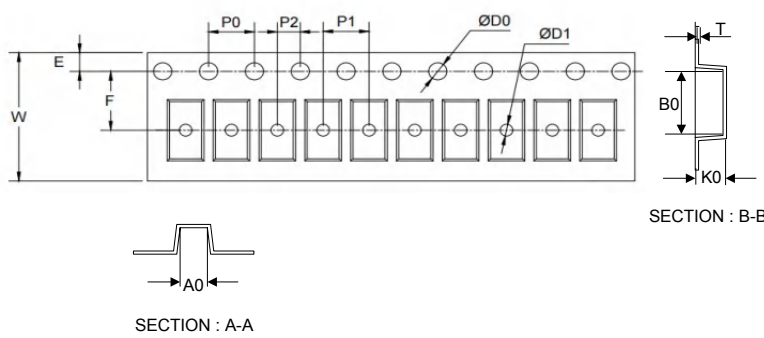
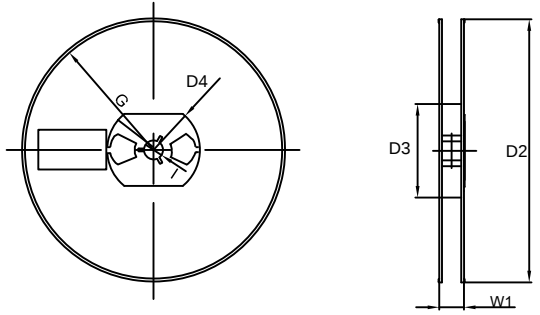


SOT-23 mechanical data

UNIT	A	C	D	E	H _E	e	M	L	L ₁	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7		0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)
	min	35	3	47	110	87	12	67		6

Dimensions	SOT23
Z	2.9
X	0.8
Y	0.9
C	2.0
E	1.35

Tape & reel specification

Tape		Symbol	Dimension (mm)
		P0	4.00±0.10
		P1	4.00±0.10
		P2	2.00±0.10
		D0	1.55±0.10
		D1	1.05±0.10
		E	1.55±0.10
		F	3.60±0.10
		W	8.00±0.10
		A0	3.80±0.20
		B0	3.25±0.20
		K0	1.45±0.10
		T	0.25±0.05
		D2	178.0±3.0
		D3	55Min.
		D4	R24.0±3.0
7" Reel		G	R82.0±3.0
		I	13.0±2.0
		W1	11.0±3.0
		Quantity: 3000PCS	