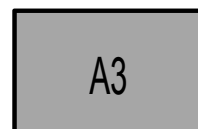
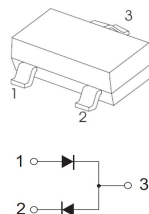


FEATURES

- Low forward voltage : $V_F(3) = 0.92V$ (typ.)
- Fast reverse recovery time : $t_{rr} = 1.6ns$ (typ.)
- Small total capacitance : $C_T = 2.2pF$ (typ.)
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



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($T_a = 25^\circ C$)

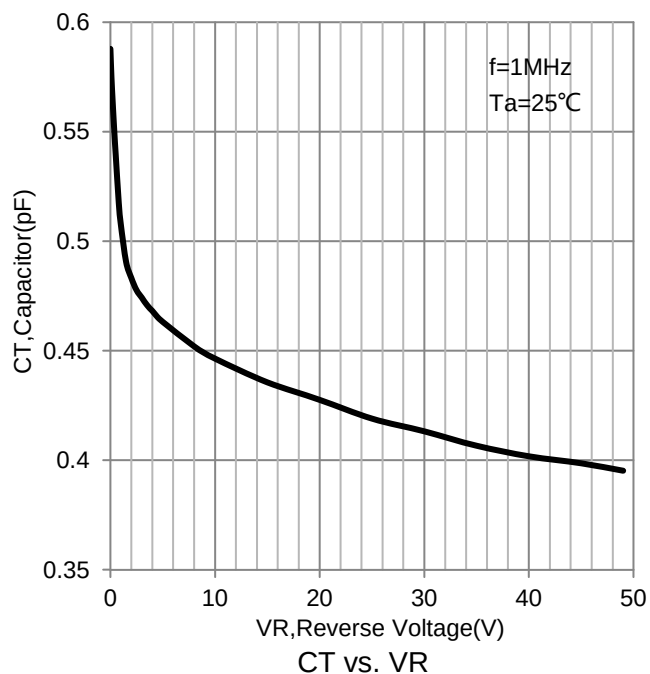
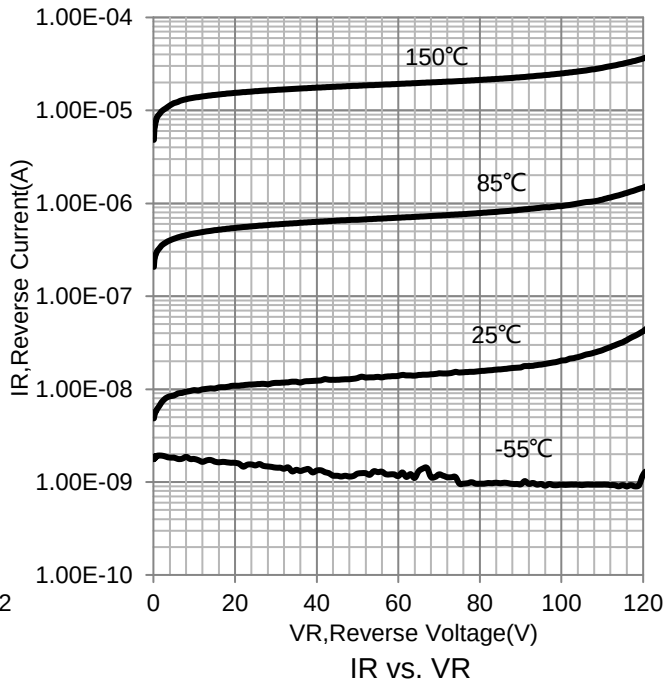
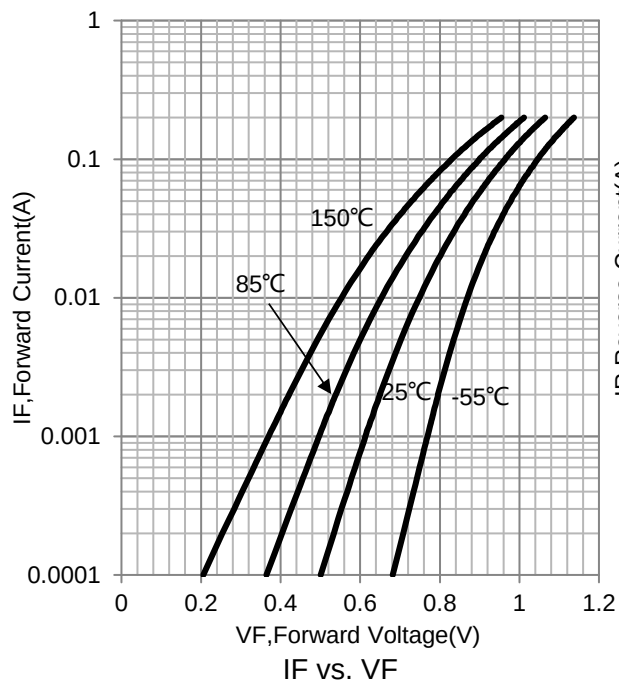
Parameter	Symbol	Limits	Unit
Maximum (peak) reverse voltage	VRM	85	V
Reverse voltage	VR	80	V
Maximum (peak) forward current	IFM	300(Note 1)	mA
Average forward current	IO	100(Note 1)	mA
Surge current (10ms)	IFSM	2(Note 1)	A
Power dissipation	P	150	mW
Junction temperature	Tj	125	°C
Storage temperature range	Tstg	-55 to +125	°C

1. Unit rating. Total rating = Unit rating $\times$ 1.5.

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

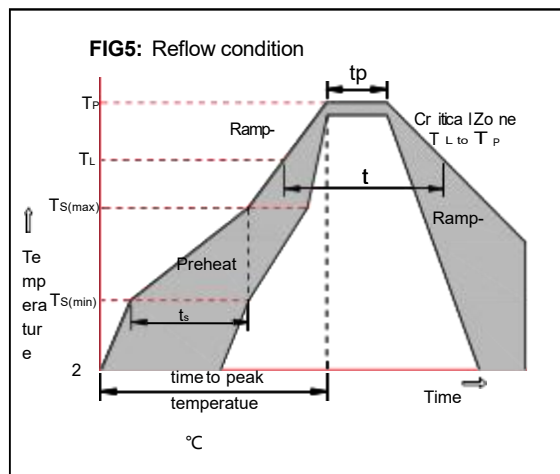
CHARACTERISTICS	Symbol	Min	Typ.	Max	Unit
Forward voltage ($I_F = 1mA$) ($I_F = 10mA$) ($I_F = 100mA$)	V_F	- - -	0.61 0.74 0.9	- - 1.2	V
Reverse current ($V_R = 30V$) ($V_R = 80V$)	I_R	- -	- -	0.1 0.5	μA
Total capacitance ($f = 1MHz, V_R = 0$)	C_T	-	2.2	4	pF
Reverse Recovery Time ($I_F = 10mA$)	T_{rr}	-	1.6	4	nS

RATING AND CHARACTERISTIC CURVES



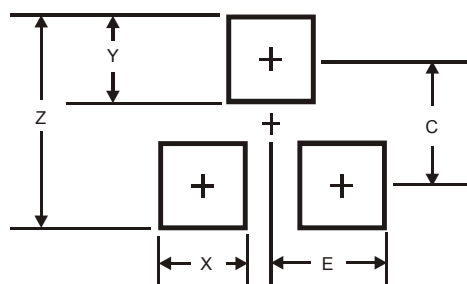
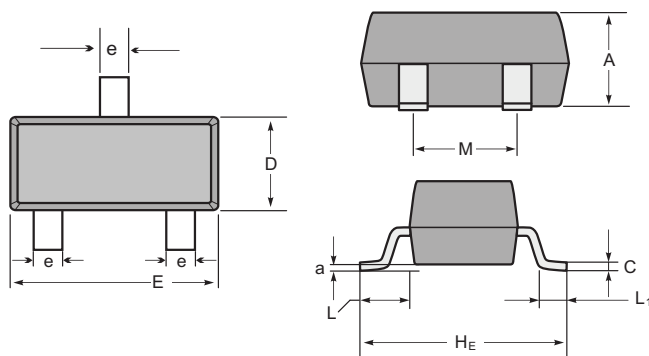
Soldering parameters

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

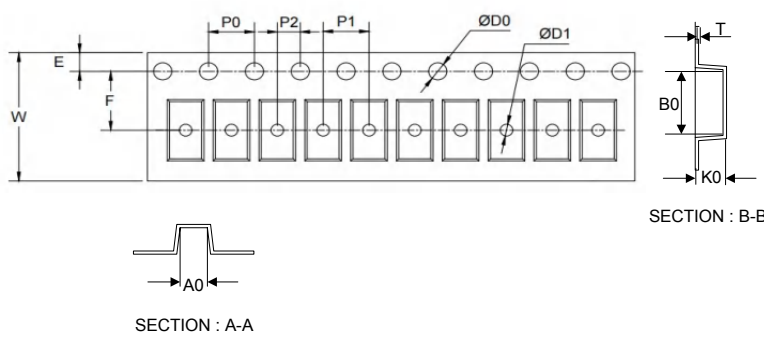
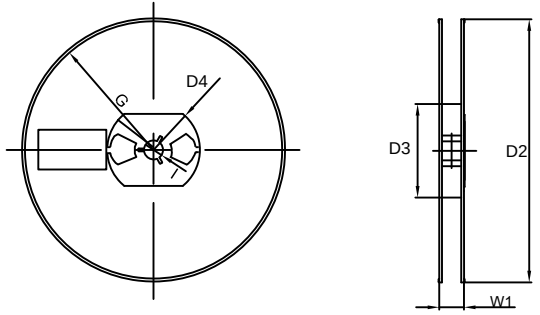


SOT-23 mechanical data

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)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7	0.36 (ref)	0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	0.0
	min	35	3	47	110	87	12	67	14 (ref)	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	