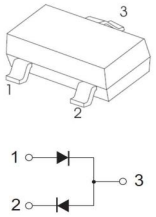
FEATURES

LOW Forward Voltage

Fast Reverse Recovery Time



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

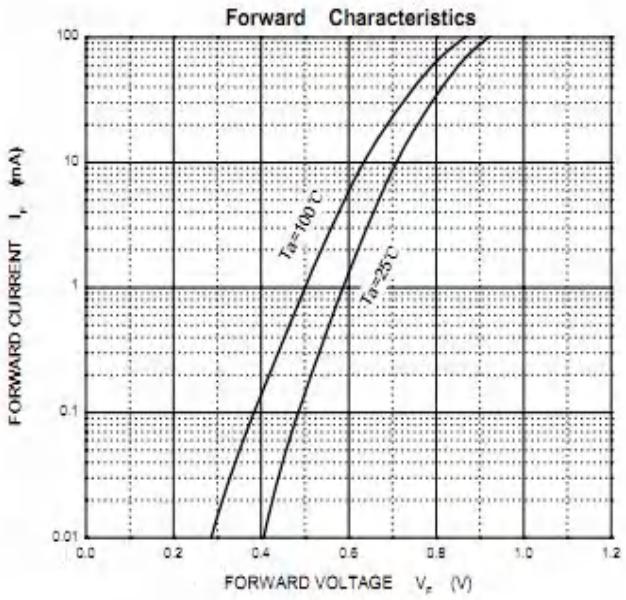
Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

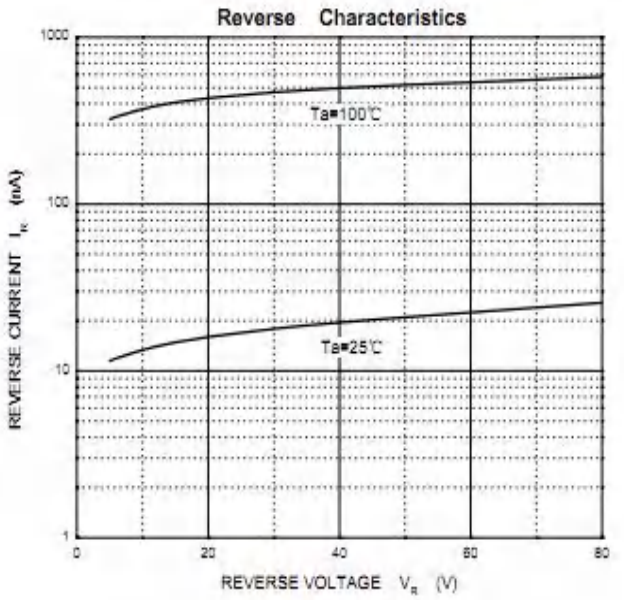
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	VRM	85	V
DC Blocking Voltage	VR	80	V
Forward Continuous Current	IFM	300	mA
Average Rectified Output Current	IO	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A
Power Dissipation	PD	150	mW
Thermal Resistance from Junction to Ambient	RθJA	833	℃/W
Junction Temperature	TJ	150	℃
Storage Temperature Range	TSTG	-55~+150	℃

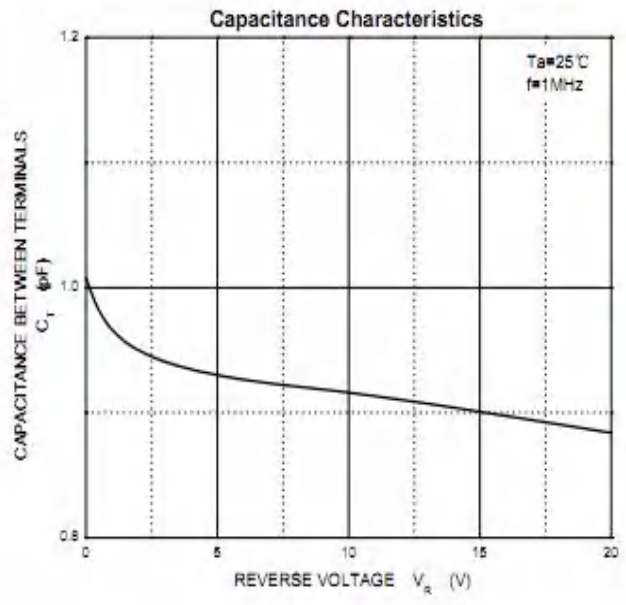
Electrical Characteristics (@Ta=25℃)

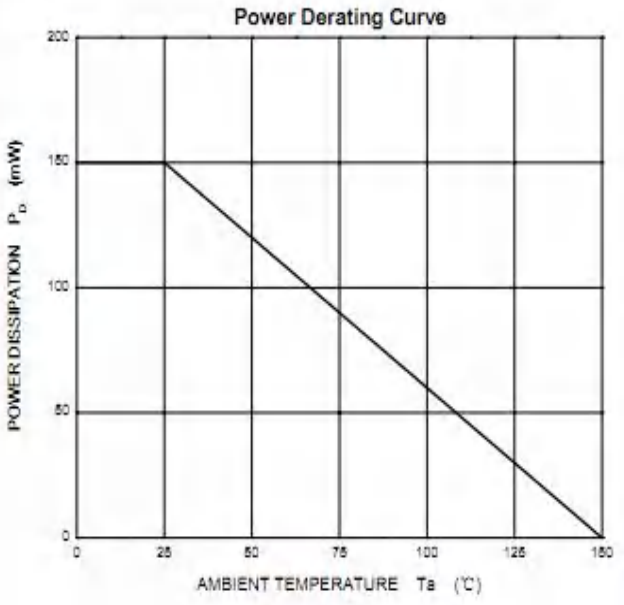
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	V(BR)	IR=100μA	80			V
Forward voltage	VF1	IF=1mA		0.61		V
	VF2	IF=10mA		0.74		V
	VF3	IF=100mA		0.92	1.2	V
Reverse current	IR1	VR=30V			0.1	uA
	IR2	VR=80V			0.5	uA
Diode Capacitance	CD	VR=0V,f=1MHz			3.0	PF
Reverse recovery time	t r r	IF=IR=10mA,Irr=0.1×IR		1.6	4.0	nS

RATING AND CHARACTERISTIC CURVES





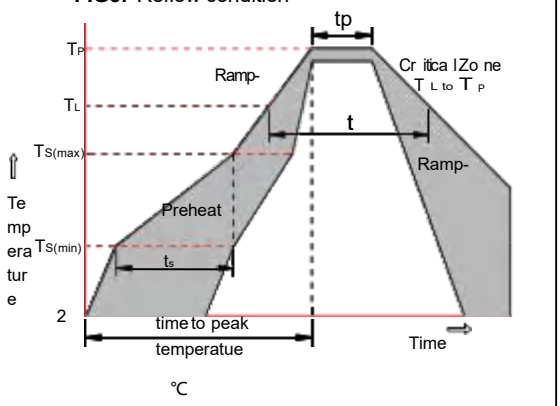




Soldering parameters

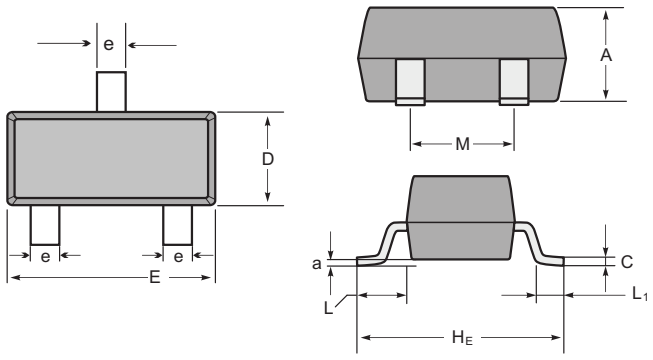
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid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

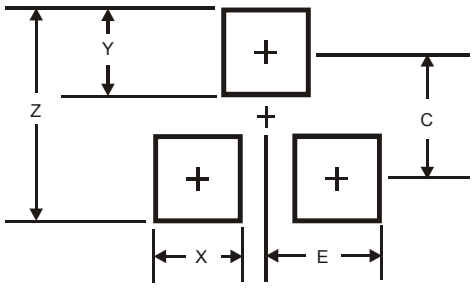
FIG5: Reflow condition



Package Dimensions & Suggested Pad Layout

SOT23





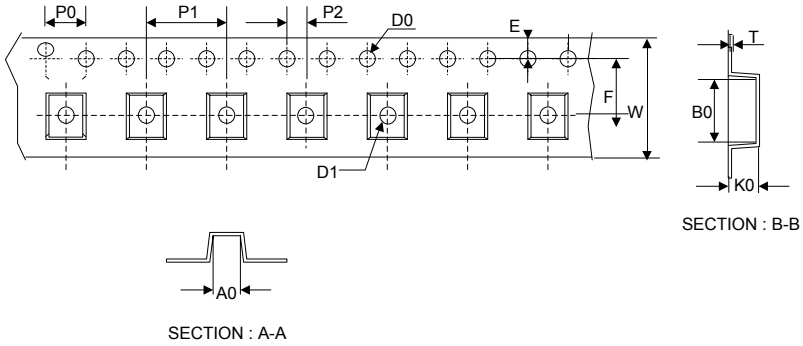
SOT-23 mechanical data

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)	0.0
	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)	0.0
	min	35	3	47	110	87	12	67			6

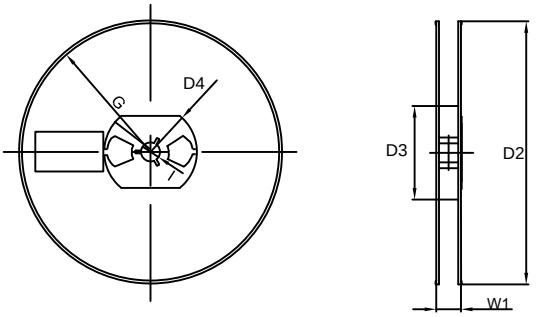
Dimensions	SOT23
Z	2.9
X	0.8
Y	0.9
C	2.0
E	1.35

Tape & rell specification

Tape



7” Reel



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
G	R82.0±3.0
I	13.0±2.0
W1	11.0±3.0
Quantity: 3000PCS	