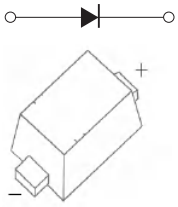
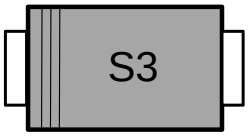
VOLTAGE RANGE
40 Volts
CURRENT
100mA

FEATURES

Small pacakage
Low forward voltage
Low reverse current





SOD-523

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings (T_a = 25 °C)

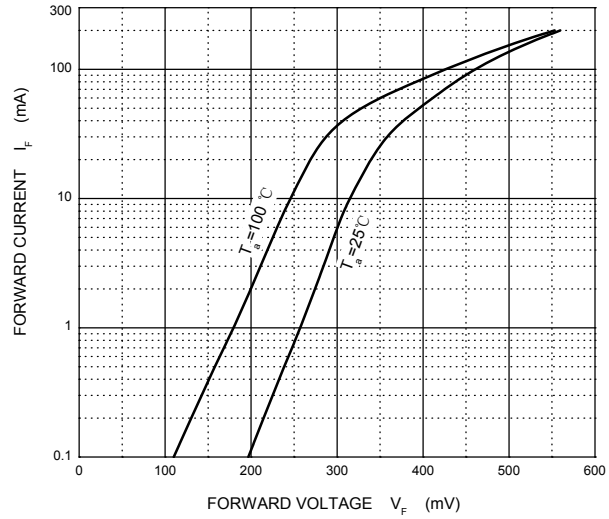
Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Maximum (peak) forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	1000	mA
Power dissipation	P_D	150	mW
Operating Junction Temperature Range	T_j	-40 ~ +125	℃
Storage Temperature Range	T_{stg}	-55 ~ +150	℃

Electrical Ratings @Ta=25℃

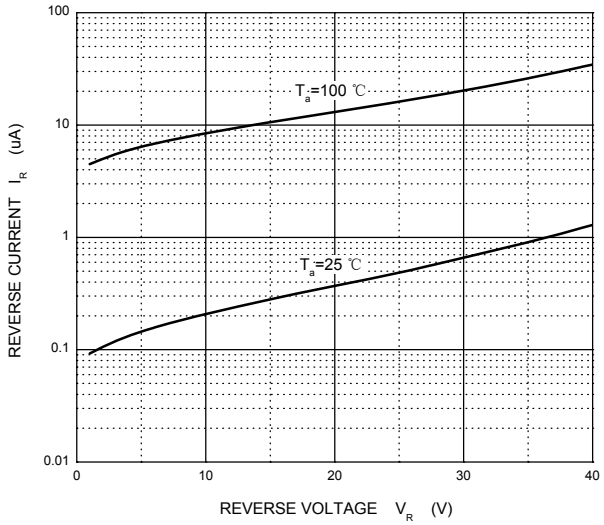
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}		0.28		V	I_F=1mA
	V_{F2}		0.36		V	I_F=10mA
	V_{F3}		0.54	0.60	V	I_F=50mA
Reverse current	I_R			5	μA	V_R=10V
Total capacitance	C_T		18	25	pF	V_R=0,f=1MHz

RATING AND CHARACTERISTIC CURVES

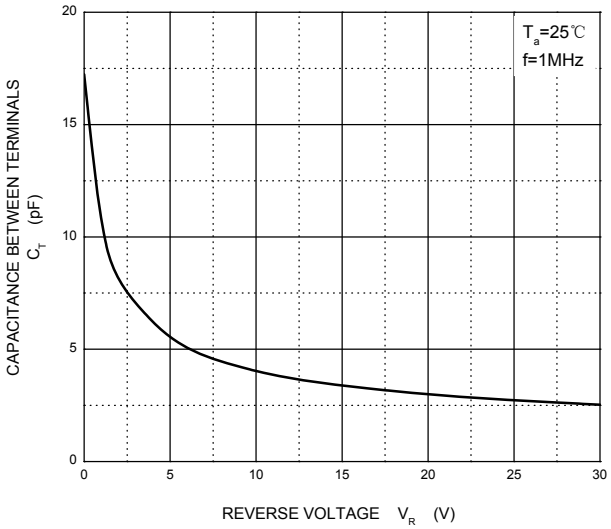
Forward Characteristics



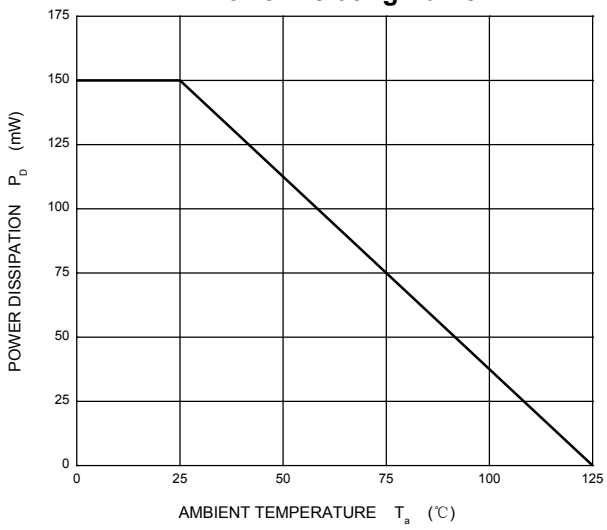
Reverse Characteristics



Capacitance Characteristics



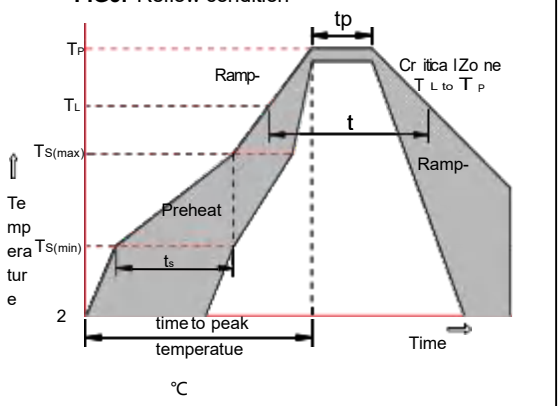
Power Derating Curve



Soldering parameters

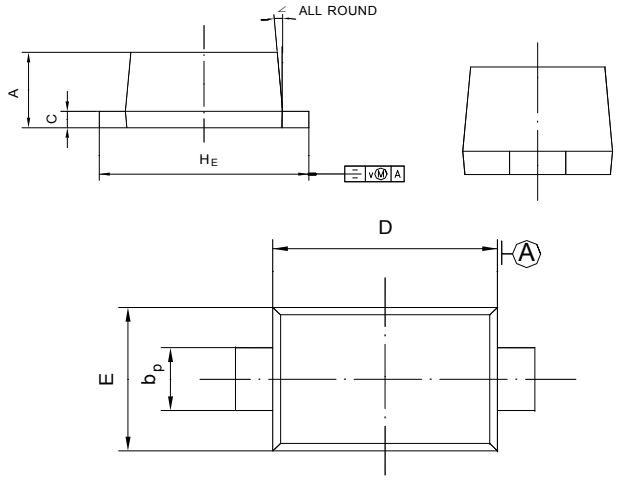
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid 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

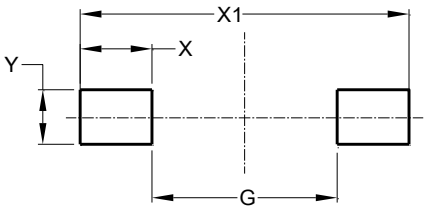


Package Dimensions & Suggested Pad Layout

SOD523



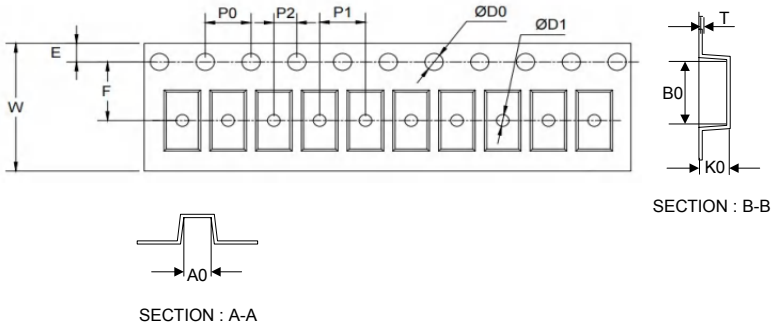
UNIT	A	b_p	C	D	E	H_E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°



Dimensions	Value (in mm)
G	0.85
X	0.70
X1	2.25
Y	0.80

Tape & rell specification

Tape

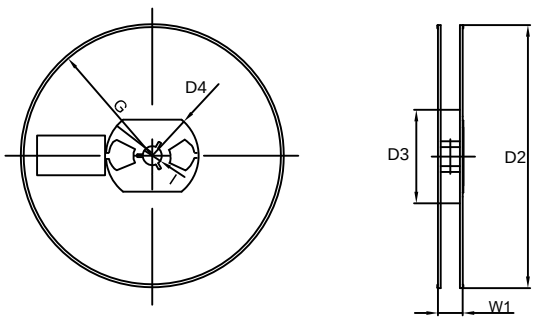


SECTION : A-A

SECTION : B-B

Symbol	Dimension (mm)
P0	4.00±0.20
P1	2.00±0.20
P2	2.00±0.20
D0	1.55±0.20
D1	0.50±0.20
E	1.55±0.25
F	3.60±0.20
W	8.00±0.20
A0	1.30±0.20
B0	2.35±0.20
K0	0.95±0.20
T	0.20±0.20

7” Reel



D2	177.0±5.0
D3	55Min.
D4	R24.6±2.0
G	R82.0±2.0
I	13.0±2.0
W1	10.20±3.0

Quantity: 3000PCS