

Maximum Ratings (@T_A = +25°C unless otherwise specified.)

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _R WM V _R	85	V
RMS Reverse Voltage		V _{R(RMS)}	60	V
Forward Continuous Current (Note 5)	Single Diode Double Diode	I _{FM}	155 75	mA
Repetitive Peak Forward Current		I _{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	@ t = 1.0µs @ t = 1.0ms @ t = 1.0s	I _{FSM}	4.0 1.0 0.5	А

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P _D	150	mW
Thermal Resistance Junction to Ambient (Note 5)	$R_{ heta JA}$	833	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics ($@T_A = +25^{\circ}C$ unless otherwise specified.)

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	$V_{(BR)R}$	85	_	_	V	$I_R = 100 \mu A$
Forward Voltage	V _F	_	_	0.715 0.855 1.0 1.25	V	I _F = 1.0mA I _F = 10mA I _F = 50mA I _F = 150mA
Leakage Current (Note 6)	I _R	_		2.0 100 60 30	•	$V_R = 75V$ $V_R = 75V$, $T_J = +150^{\circ}C$ $V_R = 25V$, $T_J = +150^{\circ}C$ $V_R = 25V$
Total Capacitance	Ст	_	1.5	_	рF	$V_R = 0, f = 1.0MHz$
Reverse Recovery Time	t _{rr}	_	_	4.0	ns	$\begin{aligned} I_F &= I_R = 10 \text{mA}, \\ I_{rr} &= 0.1 \times I_R, \ R_L = 100 \Omega \end{aligned}$

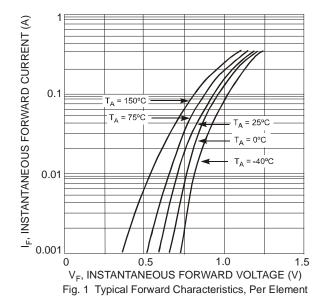
Notes:

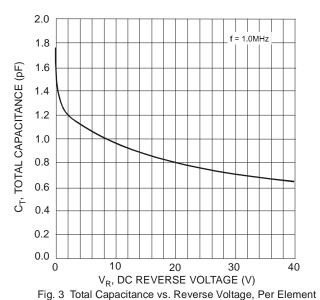
^{5.} Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at https:// www.diodes.com/package-outlines.html.

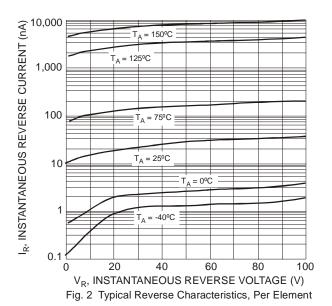
^{6.} Short duration pulse test used to minimize self-heating effect.

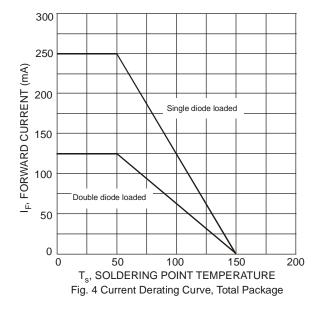










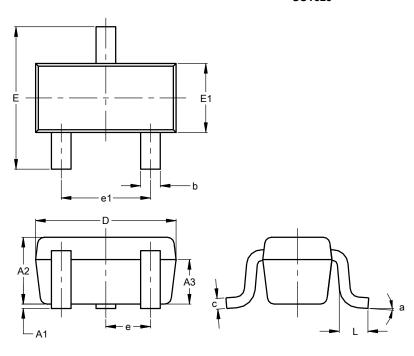




Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT523

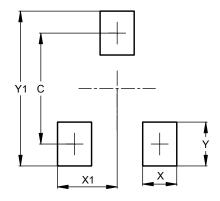


SOT523					
Dim	Min	Max	Тур		
A1	0.00	0.10	0.05		
A2	0.60	0.80	0.75		
A3	0.45	0.65	0.50		
b	0.15	0.30	0.22		
С	0.10	0.20	0.12		
D	1.50	1.70	1.60		
E	1.45	1.75	1.60		
E1	0.75	0.85	0.80		
е	0.50 BSC				
e1	0.90	1.10	1.00		
L	0.20	0.40	0.33		
а	0°		8°		
All Dimensions in mm					

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOT523



Dimensions	Value (in mm)
С	1.29
Х	0.40
X1	0.70
Y	0.51
Y1	1.80





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