



SMD Switching Diode

Reverse Voltage - 75 V
Forward Current - 150 mA

Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

Mechanical Data

- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0
- Polarity: Color band denotes cathode end
- Mounting Position : Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Ordering Information

- Package :SOD523
- Reel Size :7 (inches)

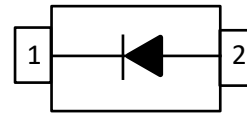
- Quantity Per Reel :3,000 pcs
- Quantity One Box :45,000 pcs
- Quantity One Carton :180,000 pcs

Package Outline



SOD523 Top View

Device Schematic & PIN Configuration



Product Type Marking Code



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

Absolute Ratings

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-repetitive Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	2	A
Power Dissipation	P_d	150	mW
Junction temperature	T_j	150	° C
Storage Temperature Range	T_{STG}	-55 to +150	° C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	° C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Breakdown Voltage	$I_R = 1\mu A$	V_{BR}	75	-	-	V
Reverse Leakage Current	$V_R = 20V$	I_R	-	-	25	nA
	$V_R = 75V$		-	-	1	uA
Forward Voltage	$I_F = 1mA$	V_F	-	-	0.715	V
	$I_F = 10mA$		-	-	0.855	
	$I_F = 50mA$		-	-	1	
	$I_F = 150mA$		-	-	1.25	
Reverse Recovery Time	$I_F = I_R = 10mA, I_{rr} = 0.1 * I_R, R_L = 100\Omega$	T_{RR}	-	-	4	ns
Junction Capacitance	$V_R = 0V, F = 1MHz$	C_j	-	-	2	pF



Rating and Characteristic Curves

FIG.1 - Forward Characteristics

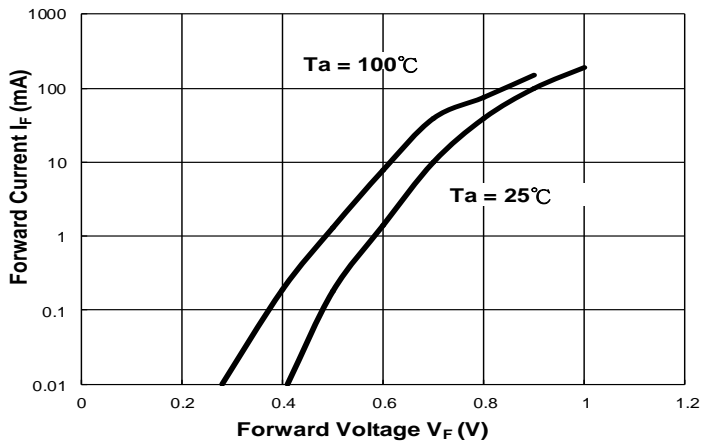


FIG.2 - Reverse Characteristics

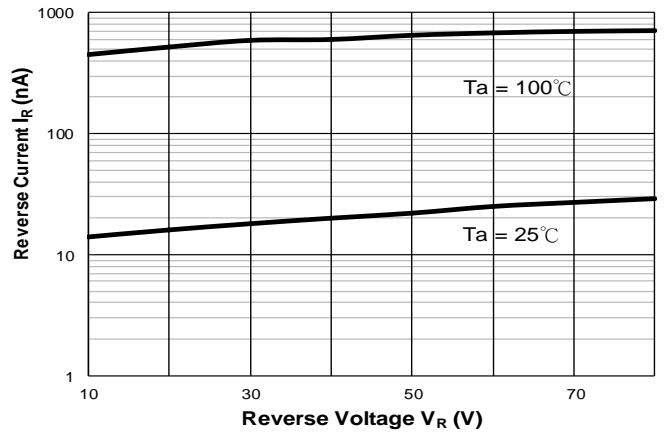


FIG.3 - Power Daring Curve

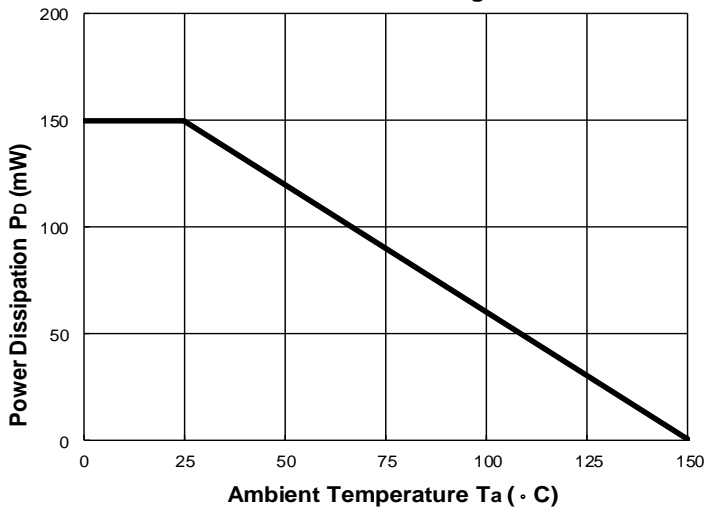
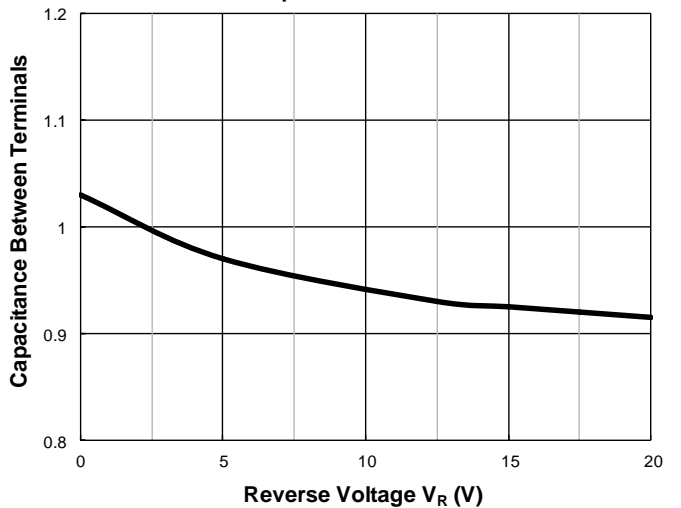
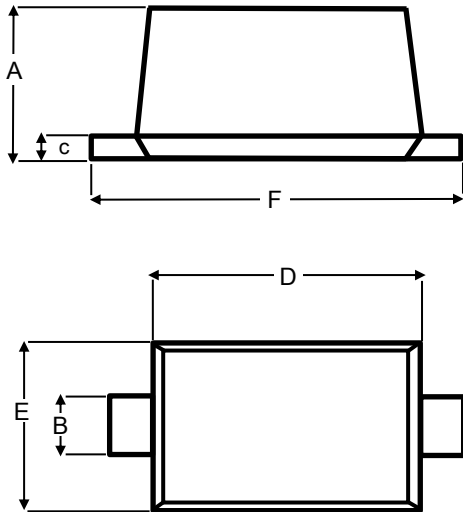


FIG.4 - Capacitance Characteristic





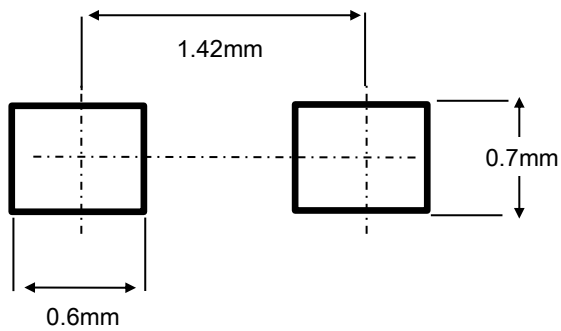
Package Outline Dimensions



SOD523 Package		
Dim	Min	Max
A	0.53	0.73
B	0.28	0.38
c	0.08	0.15
D	1.1	1.3
E	0.75	0.85
F	1.5	1.7
All Dimensions in mm		

Products with logo

Suggested Soldering Pad Layout



Note:

- 1.The pad layout is for reference purposes only.
- 2.General tolerance $\pm 0.05\text{mm}$



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