

Features

- Low forward voltage drop
- Guard ring construction for transient protection
- Negligible reverse recovery time
- Low reverse capacitance



SOD-523

1.Cathode
2.Anode

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Working peak	V_{RWM}		
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	28	V
Forward continuous current	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$	I_{FRM}	1.5	A
Power Dissipation	P_d	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	667	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	$^\circ\text{C}$

Notes: 1. Part mounted on FR-4 board with recommended pad layout

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100 \mu\text{A}$	40			V
Forward Voltage Drop	V_{FM}	$I_F = 20\text{mA}$ $I_F = 200\text{mA}$			0.37 0.60	V
Peak Reverse Current	I_{RM}	$V_R = 30\text{V}$			5	μA
Total Capacitance	C_T	$V_R = 0\text{V}, f = 1.0\text{MHz}$		50		pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 200\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		10		ns

Typical Characteristics

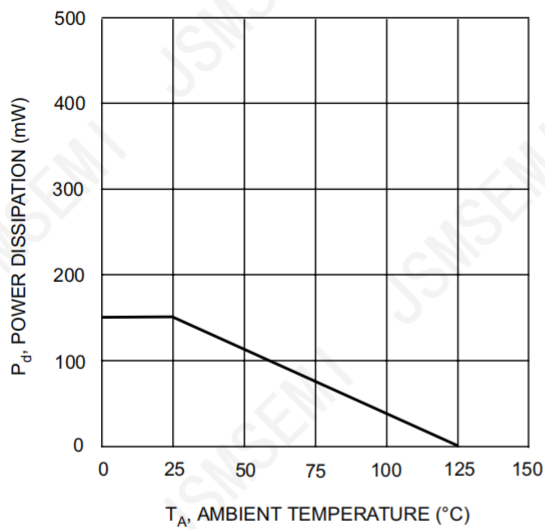


Fig.1 Power Derating Curve

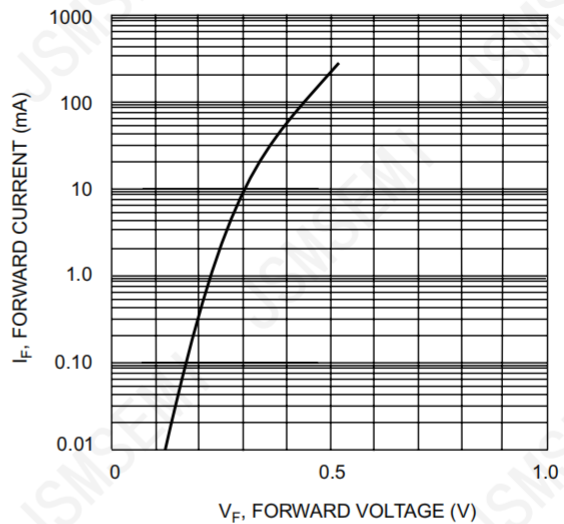


Fig. 2 Typical Forward Characteristics

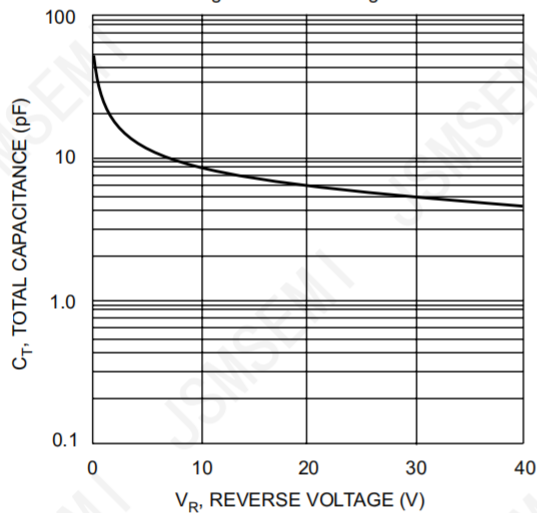
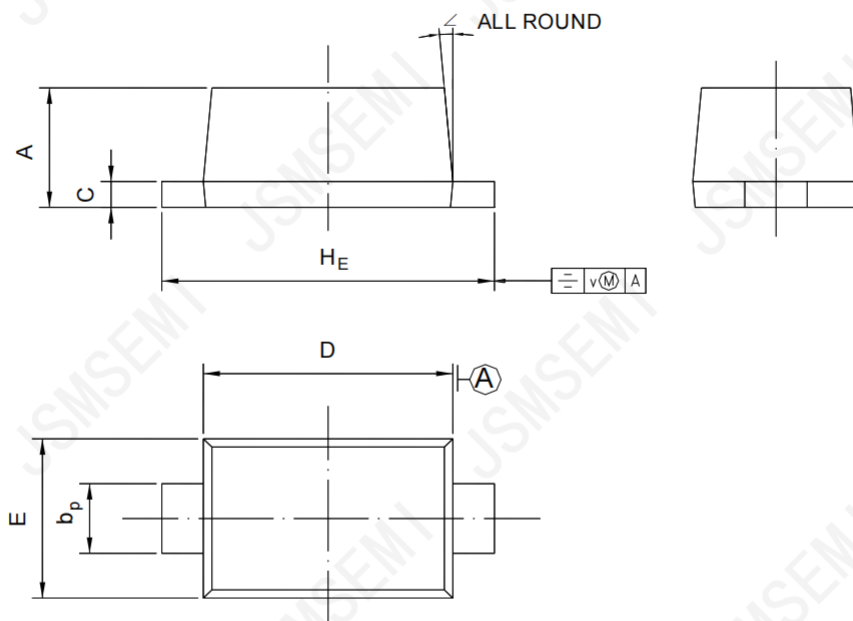


Fig. 3 Typ. Total Capacitance vs Reverse Voltage

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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