



RB501V-40

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 45 Volts **CURRENT** 100 mA

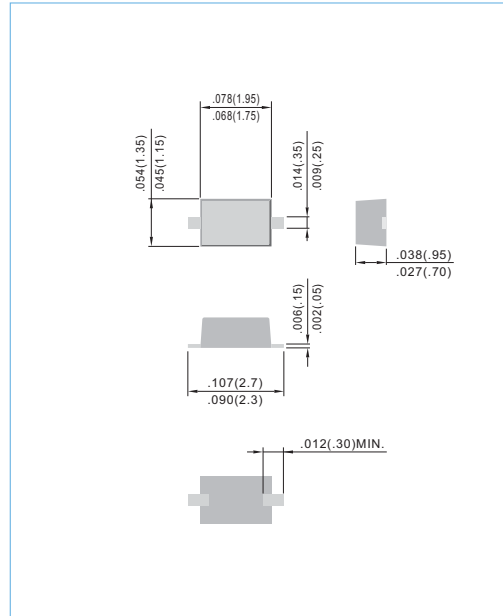
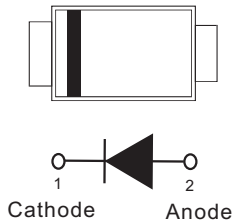
SOD-323 Unit: inch (mm)

FEATURES

- Extremely Fast Switching Speed
- Very Low V_F : 0.32V (Typ) at $I_F = 10\text{mA}$
- Surface mount package ideally suited for automatic insertion
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Appox Weight : 0.0041 gram
- Marking : 501
- Polarity : Color band cathode



ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Maximum Peak Reverse Voltage	V_{RRM}	45	V
Reverse DC Voltage	V_R	30	V
Maximum Forward Current	$I_{F(AV)}$	0.1	A
Maximum Forward Peak Current (60Hz-1 cycle)	I_{FSM}	1.0	A
Power Dissipation ⁽¹⁾	P_{TOT}	0.2	A
Peak Forward Surge Current at t=8.3ms	I_{FSM}	500	mA
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to + 125	°C

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Thermal Resistance, Junction to Ambient ⁽¹⁾	$R_{\theta JA}$	300	°C/W

1. FR-4 Board = 70 x 60 x 1mm. Minmum Pad Layout

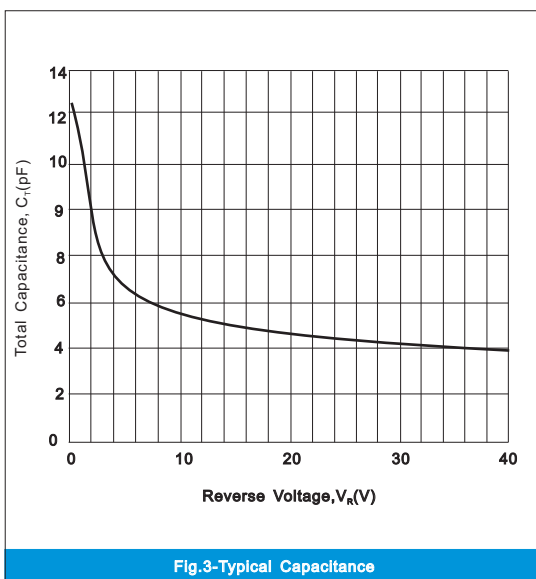
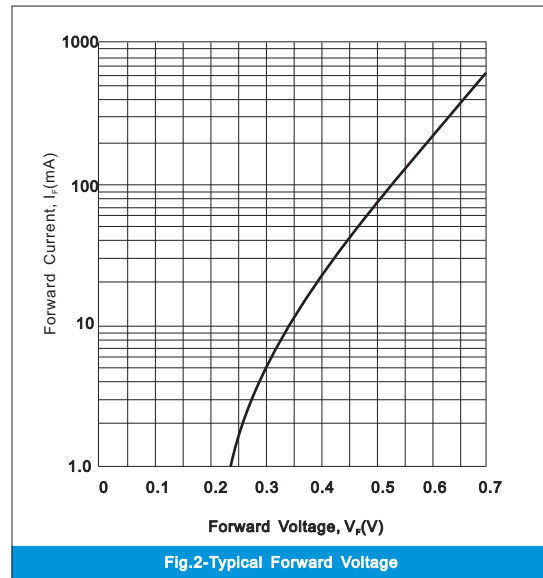
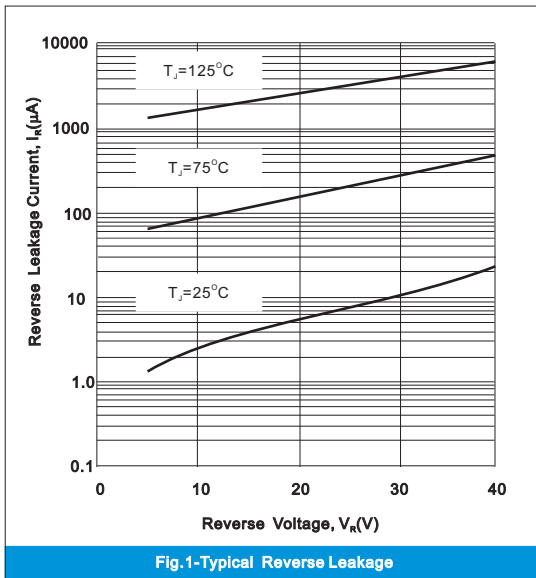


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ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Leakage Current	I_R	$V_R=10\text{V}$	-	-	10	μA
Forward Voltage	V_F	$I_{F1}=10\text{mA}$ $I_{F2}=100\text{mA}$	-	-	0.34 0.55	V
Total Capacitance	C_T	$V_R=10\text{V}, F=1\text{MHz}$	-	6	-	pF

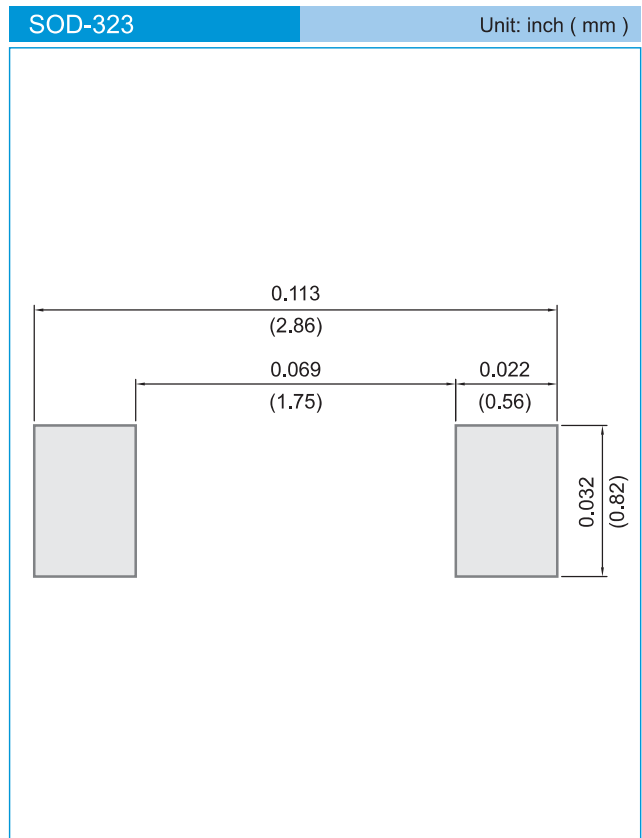
ELECTRICAL CHARACTERISTICS CURVE





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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

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