

RB500V-40

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 45 Volt **CURRENT** 100 mA

SOD-323

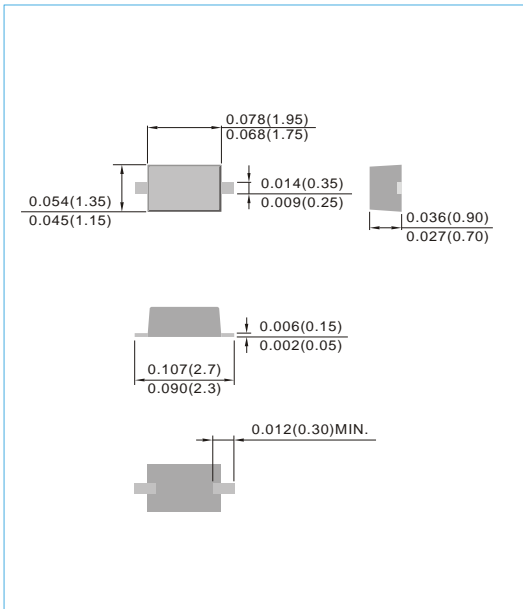
Unit : inch(mm)

FEATURES

- Extremely Fast Switching Speed
- Very Low V_F : 0.37V (Typ) at $I_F = 10\text{mA}$
- Surface mount package ideally suited for automatic insertion
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx Weight : 0.00014 ounces, 0.0041 grams
- Polarity : Color band cathode
- Marking : 500



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 at $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation (Note 1)	P_{TOT}	0.2	W
Junction Temperature	T_J	-55 to + 125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to + 125	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	700	$^{\circ}\text{C/W}$

NOTE :

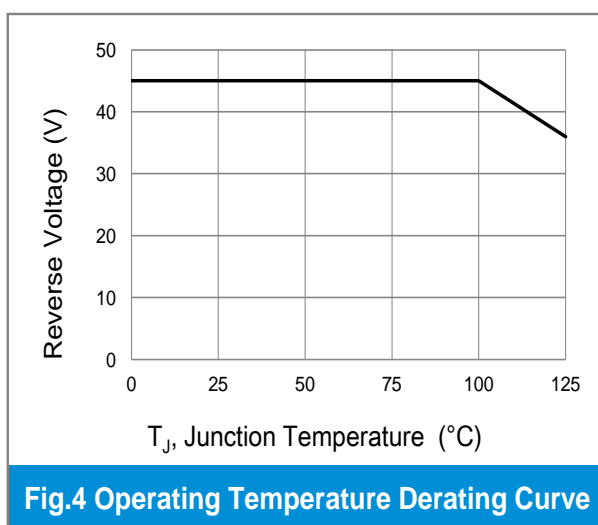
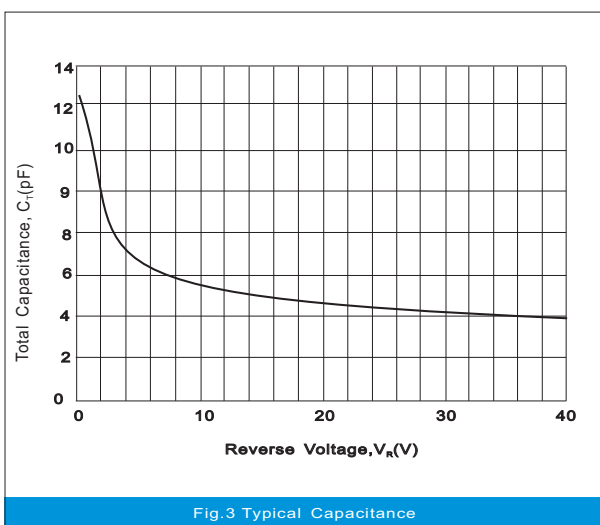
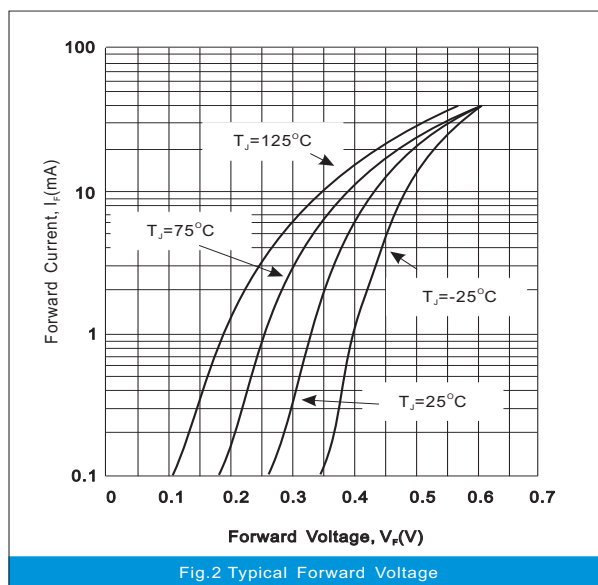
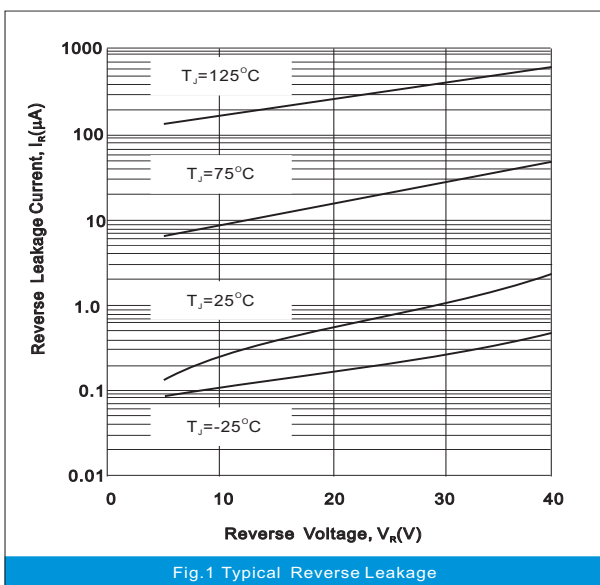
1. Mounted on an FR-4 PCB, single-sided copper, with 76.2x114.3 mm copper pad area.

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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	$V_R = 10\text{V}$	-	-	1	μA
Forward Voltage	V_F	$I_F = 10\text{mA}$	-	-	0.45	V
Total Capacitance	C_T	$V_R = 10\text{V}, F = 1\text{MHz}$	-	6	-	pF

ELECTRICAL CHARACTERISTICS CURVE

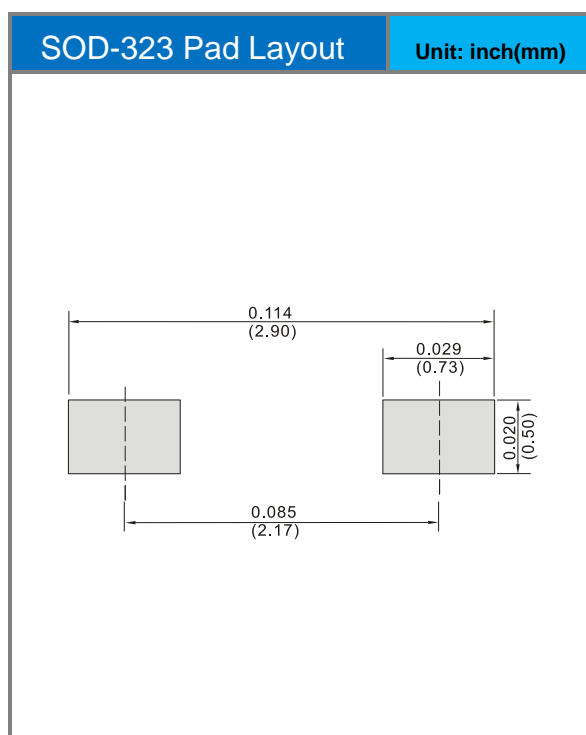


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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
RB500V-40	SOD-323	5K pcs / 7" reel	500
RB500V-40	SOD-323	12K pcs / 13" reel	500

Mounting Pad Layout



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