

RB500V-40

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 45 Volts

CURRENT 100 mA

SOD-323

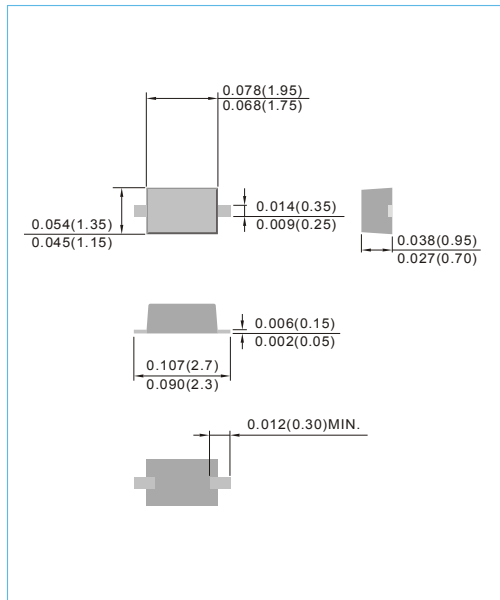
Unit : inch(mm)

FEATURES

- Extremely Fast Switching Speed
- Very Low V_F : 0.37V (Typ) at $I_F = 10\text{mA}$
- Surface mount package ideally suited for automatic insertion
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Appox Weight : 0.00014 ounces, 0.0041 grams
- Marking : 500
- 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 at $t=8.3\text{ms}$	I_{FSM}	1.0	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:

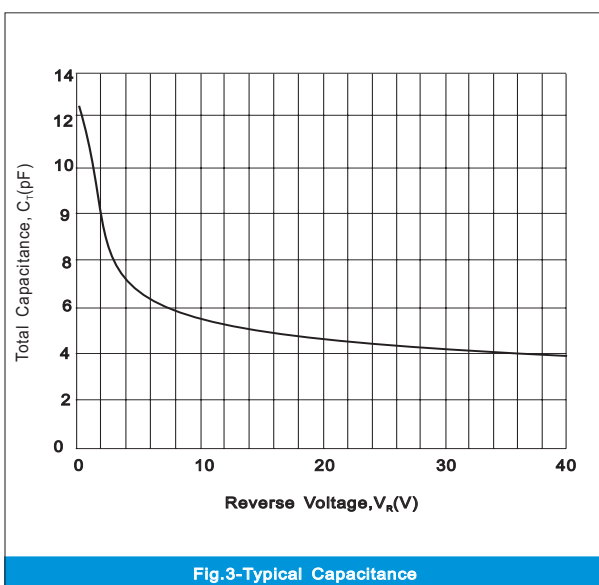
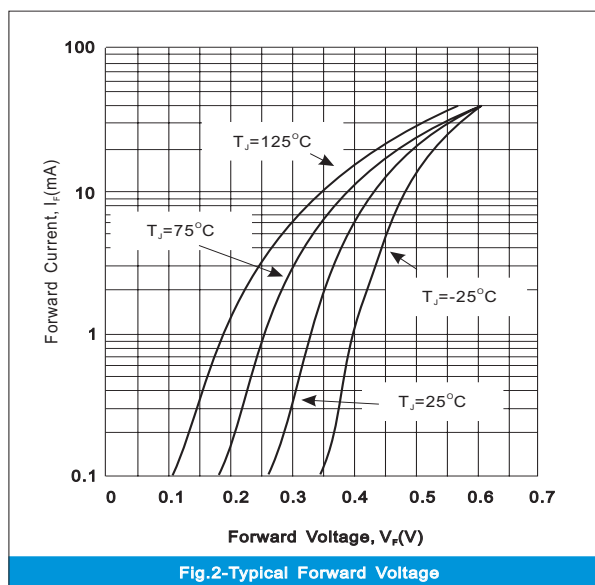
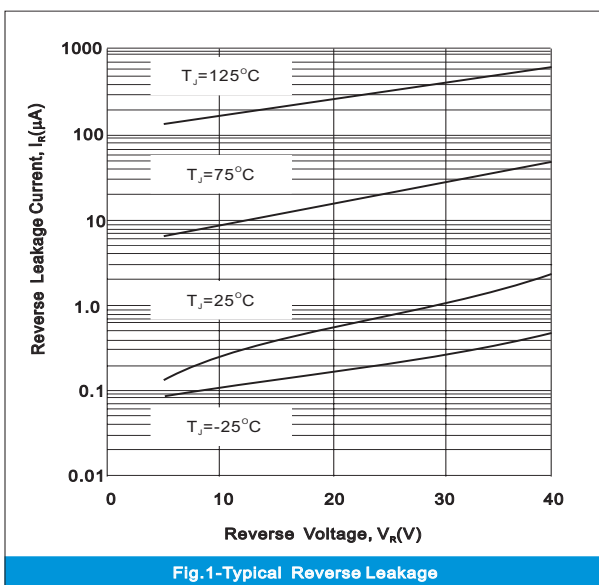
1. Mounted on an FR-4 PCB, single-sided copper, with 76.2x114.3 mm copper pad area.

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

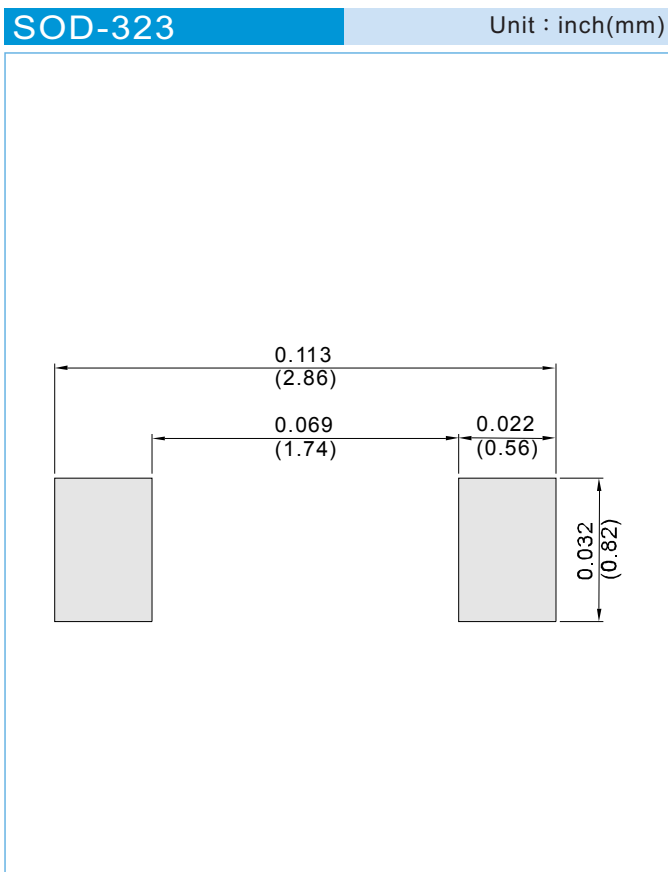
Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Leakage Current	I_R	$V_R = 10\text{V}$	-	-	0.5	μA
Forward Voltage	V_F	$I_F = 10\text{mA}$	-	-	0.45	V
Total Capacitance	C_T	$V_R = 10\text{V}, F = 1\text{MHz}$	-	6	-	pF

ELECTRICAL CHARACTERISTICS CURVE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

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Part No_packing code_Version

RB500V-40_R1_00001

RB500V-40_R2_00001

For example :

RB500V-40 **R2** **00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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