

RB501V-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 : 0.32V (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
- Polarity : Color band denotes cathode end
- Appox Weight : 0.0001 ounces, 0.0041 grams
- Marking : 501



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-1cycle)	I_{FSM}	1	A
Power Dissipation ⁽¹⁾	P_{TOT}	0.2	W
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

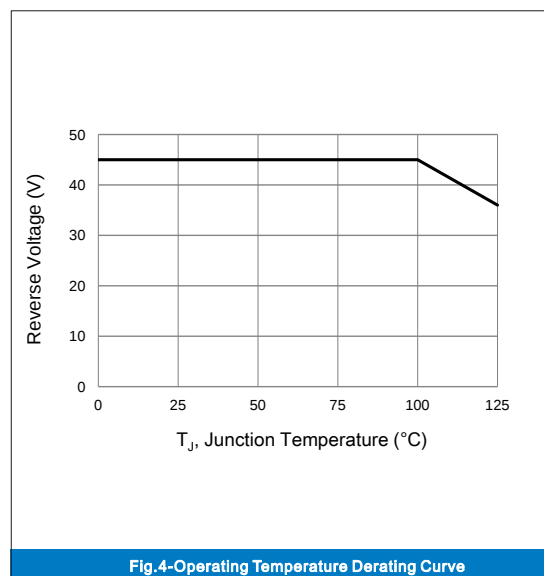
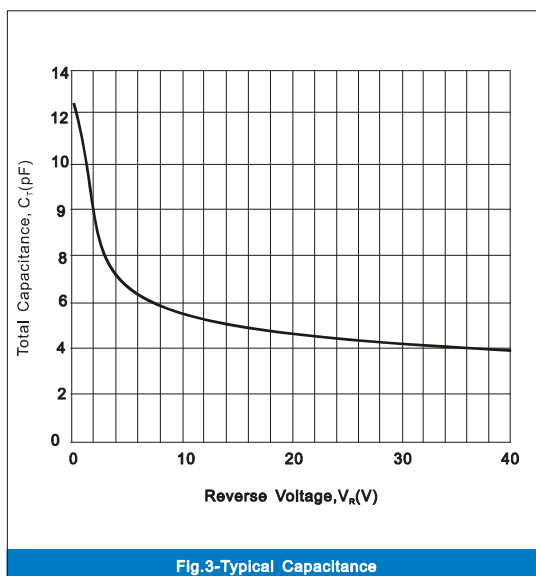
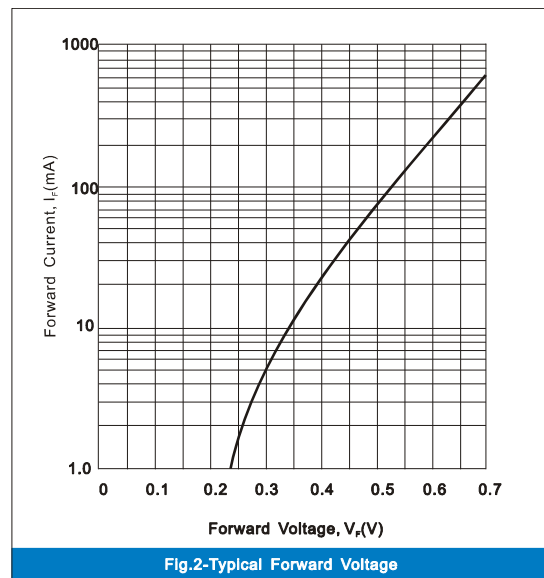
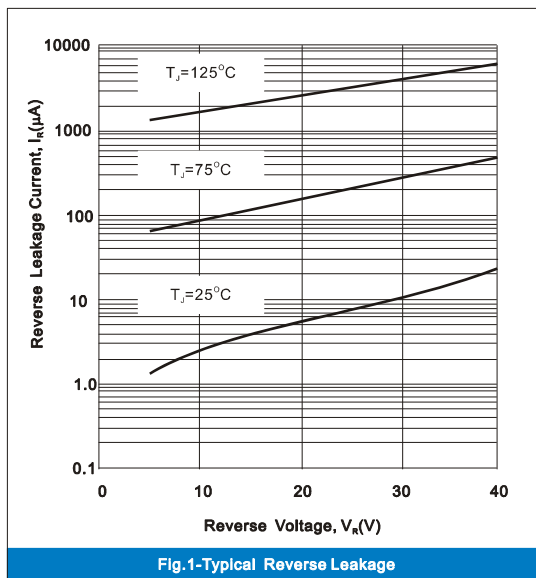
1. FR-4 Board = 70 x 60 x 1mm. Minmum Pad Layout

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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

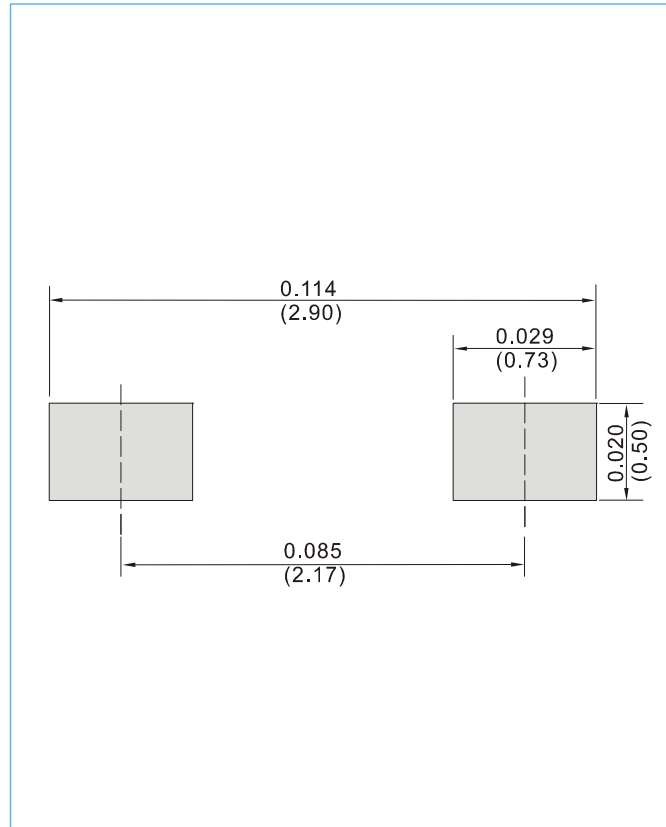


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MOUNTING PAD LAYOUT

SOD-323

Unit : inch(mm)



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

RB501V-40_R1_00001

RB501V-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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