

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

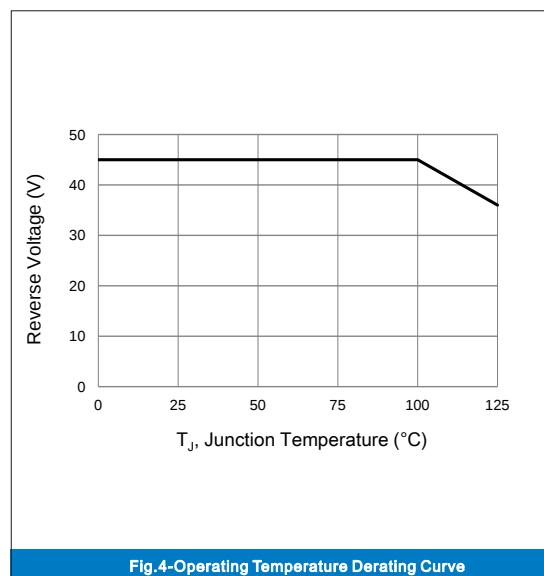
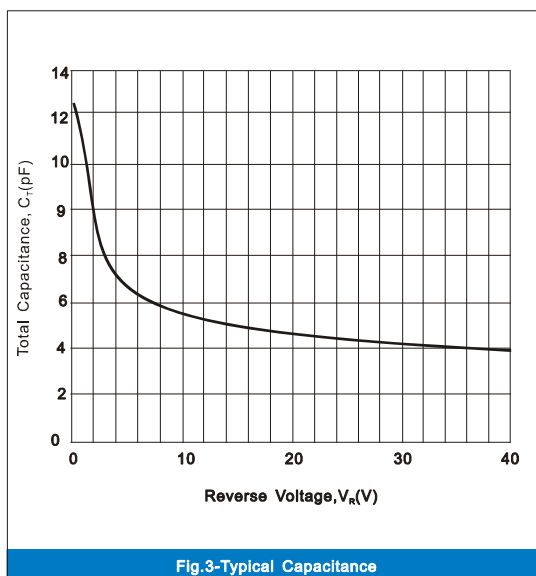
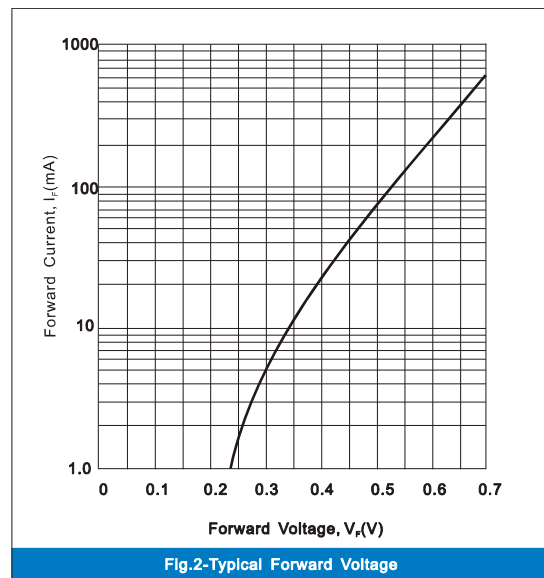
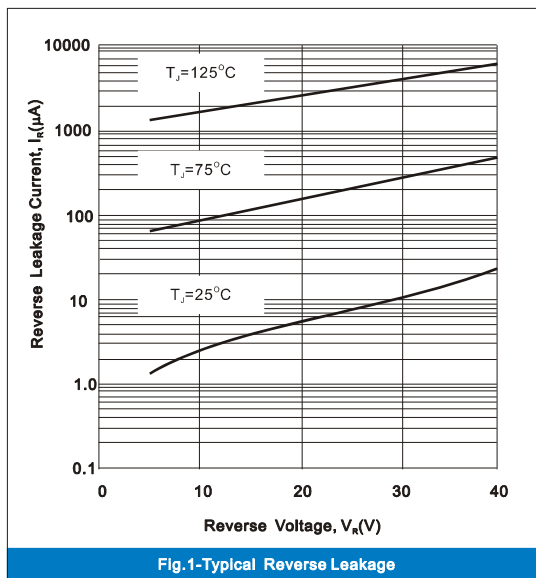
1. FR-4 Board = 70 x 60 x 1mm. Minmum Pad Layout

RB501V-40

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

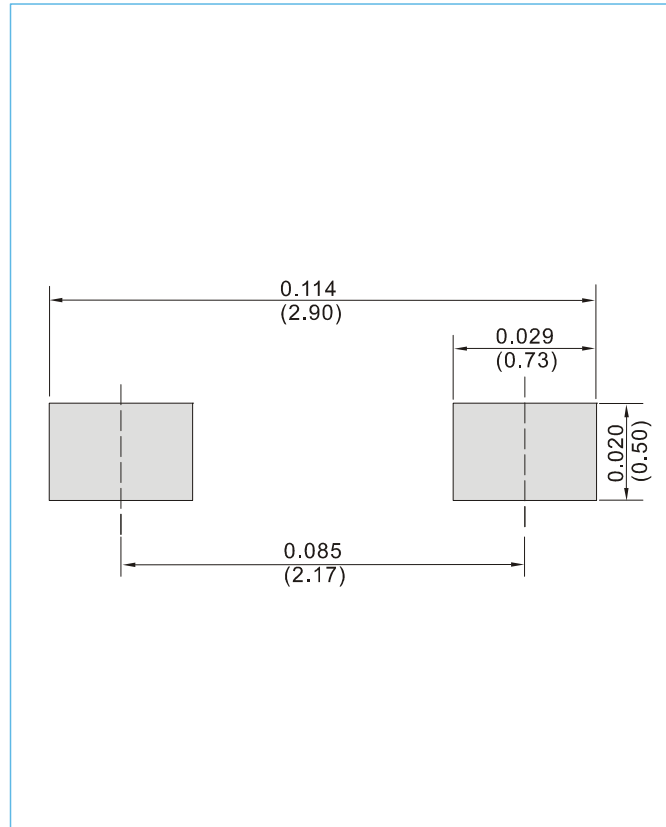


RB501V-40

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

RB501V-40

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			



RB501V-40

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.