



# RB501V-40

## SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 45 Volt    **CURRENT** 100 mA

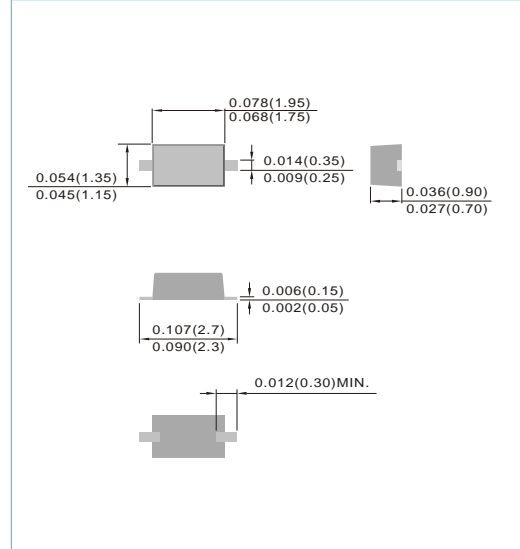
**SOD-323**    Unit : inch(mm)

### 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 <sup>(1)</sup>	$P_{TOT}$	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 <sup>(1)</sup>	$R_{\theta JA}$	300	°C/W

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

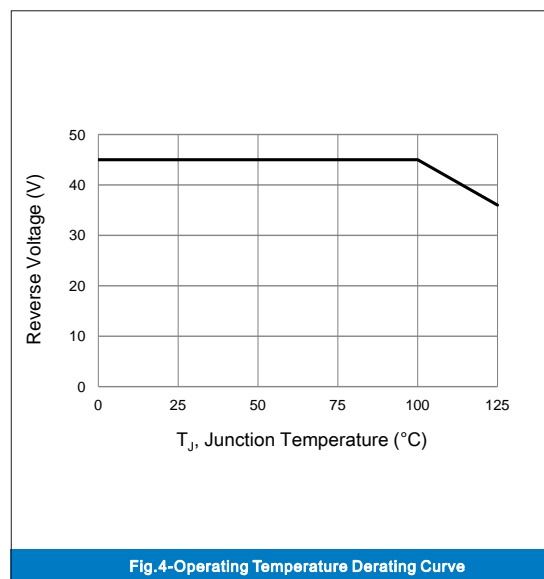
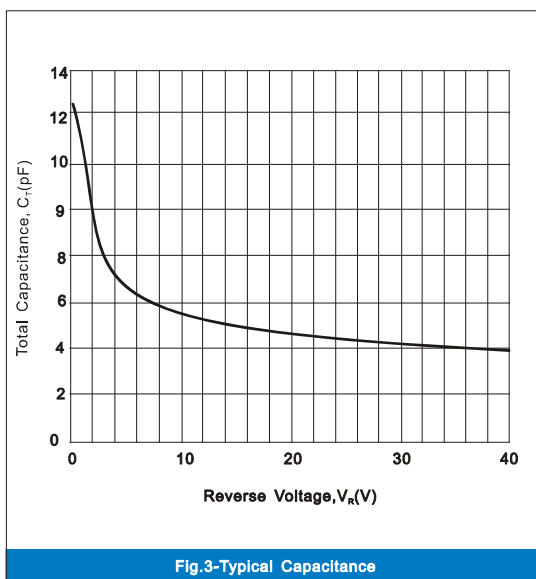
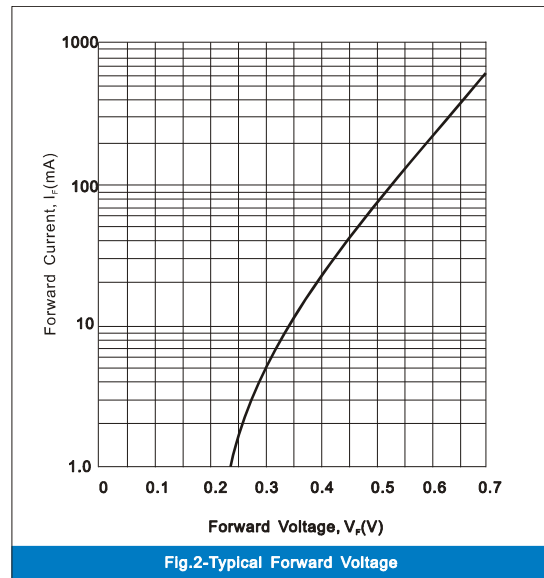
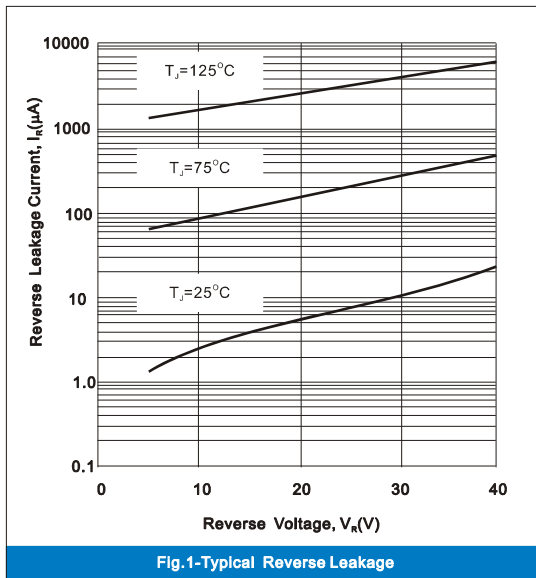


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## ELECTRICAL CHARACTERISTICS ( $T_J = 25^\circ\text{C}$ unless otherwise noted )

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Leakage Current	$I_R$	$V_R=10\text{V}$	-	-	10	$\mu\text{A}$
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

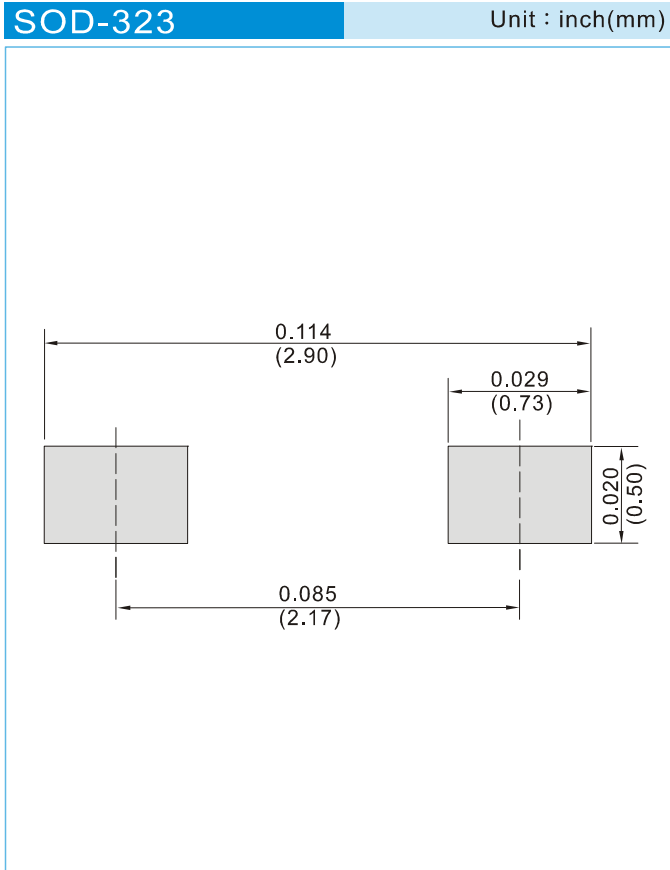
## ELECTRICAL CHARACTERISTICS CURVE





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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



# RB501V-40

## Part No\_packing code\_Version

RB501V-40\_R1\_00001

RB501V-40\_R2\_00001

For example :

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



Packing Code <b>XX</b>				Version Code <b>XXXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> 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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