



RB500V-40

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 45 Volts **CURRENT** 100 mA

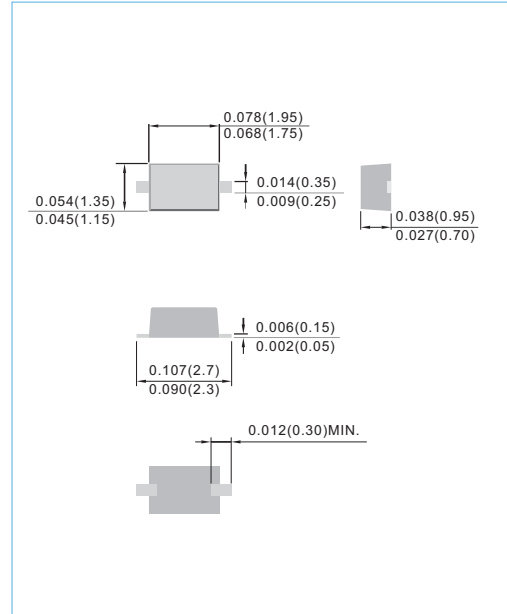
SOD-323 Unit : inch(mm)

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 (60Hz-1cycle)	I_{FSM}	1.0	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 1 mm. Minmum Pad Layout

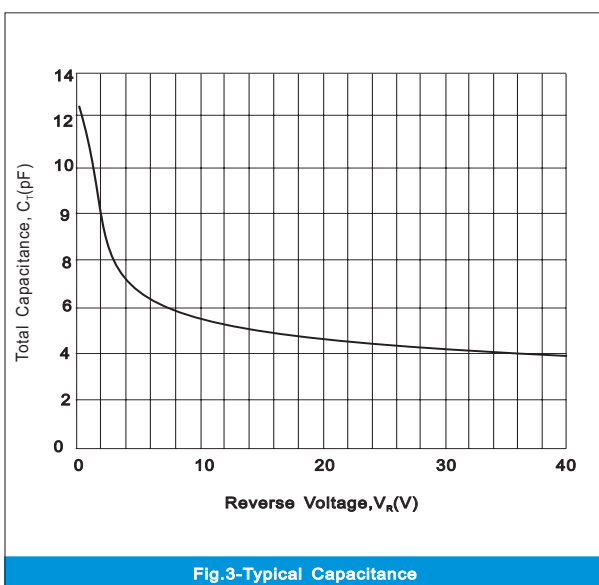
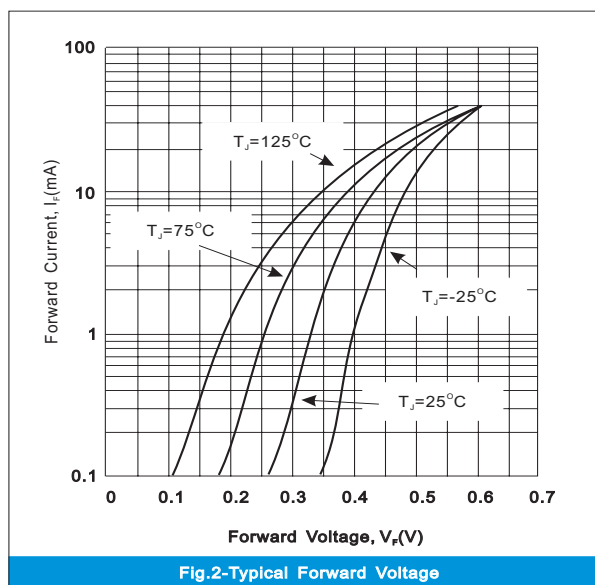
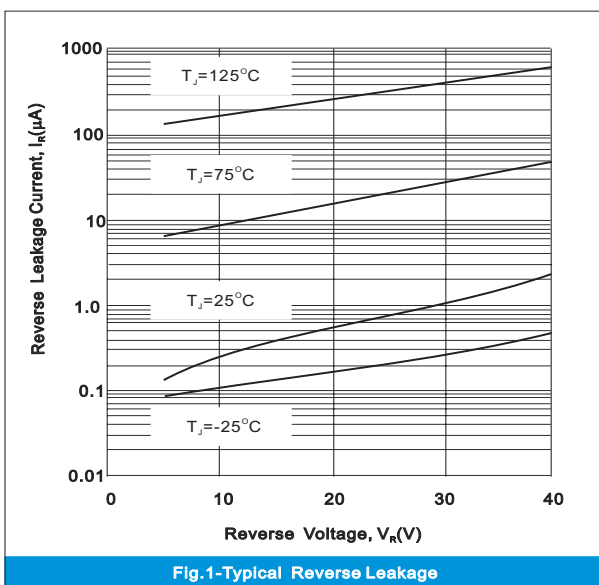


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ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

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

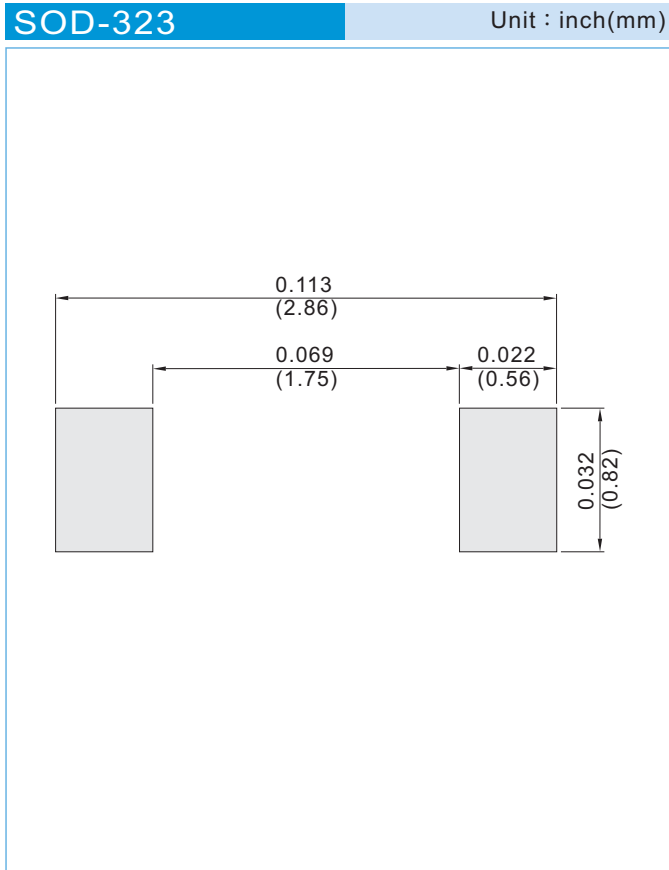
ELECTRICAL CHARACTERISTICS CURVE





RB500V-40

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

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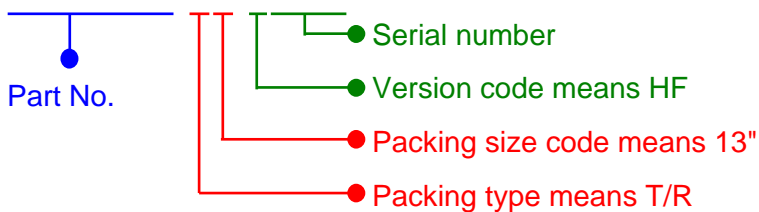


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Part No_packing code_Version

For example :

RB500V-40_R2_00000



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			