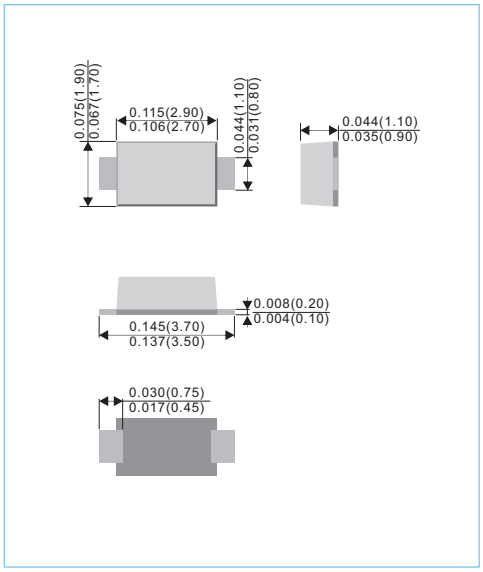
MBR1040VL

SURFACE MOUNT LOW FORWARD DROP SCHOTTKY BARRIER

VOLTAGE 40 Volt **CURRENT** 1 Ampere

SOD-123FL Unit : inch(mm)

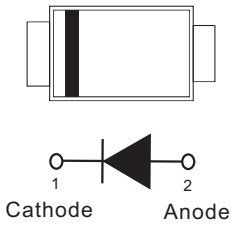


FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrical identical standard JEDEC.
- High conductor
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOD-123FL, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0006 ounces, 0.017 grams
- Marking : RU
- Polarity : Color band cathode



ABSOLUTE RATINGS

PARAMETER	Symbol	Value	Units
Reverse Voltage	V_R	40	V
Peak Reverse Voltage	V_{RRM}	40	V
Average Rectified Current	I_O	1.0	A
Non-repetitive Peak Forward Surge Current at t=8.3ms	I_{FSM}	40	A

THERMAL CHARACTERISTICS

PARAMETER	Symbol	Value	Units
Thermal Resistance , Junction to Ambient	$R\theta_{JA}$	125	$^oC/W$
Junction Temperature	T_J	125	^oC
Storage Temperature at Temp=25^oC	T_{STG}	-55 to 125	^oC

Note.1 Mounted with minimum recommended pad size, PC Board FR4.

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ELECTRICAL CHARACTERISTICS

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=500 uA	40	--	--	V
Reverse Current	I_R	V_R=40 V	--	--	450	uA
Forward Voltage	V_F	I_F=0.5A I_F=1.0A	--	--	0.34 0.36	V
Diode Capacitance	C_T	V_R=4V, f=1.0MHz	--	--	150	pF

RATING AND CHARACTERISTIC CURVES

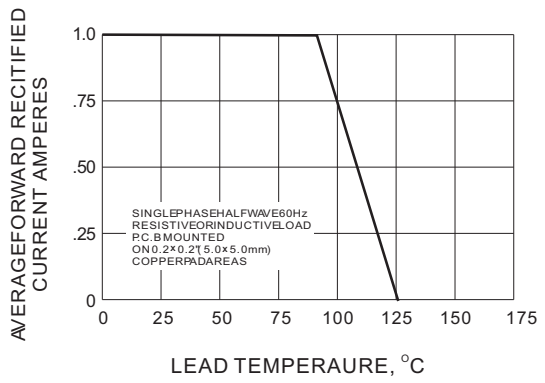


Fig.1- FORWARD CURRENT DERATING CURVE

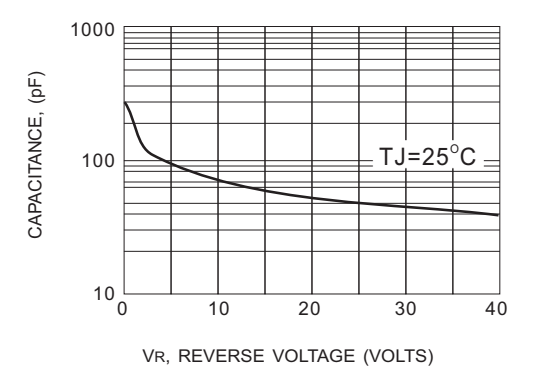


Fig.2- TYPICAL JUNCTION CHARACTERISTIC

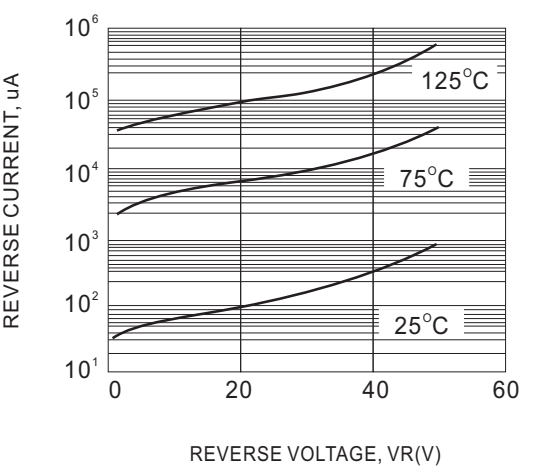


Fig.3- TYPICAL REVERSE CHARACTERISTIC

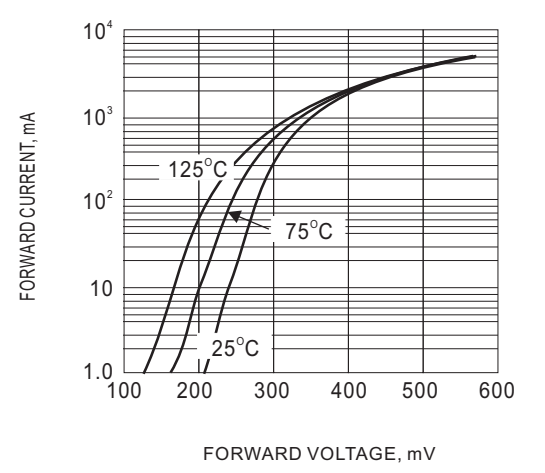
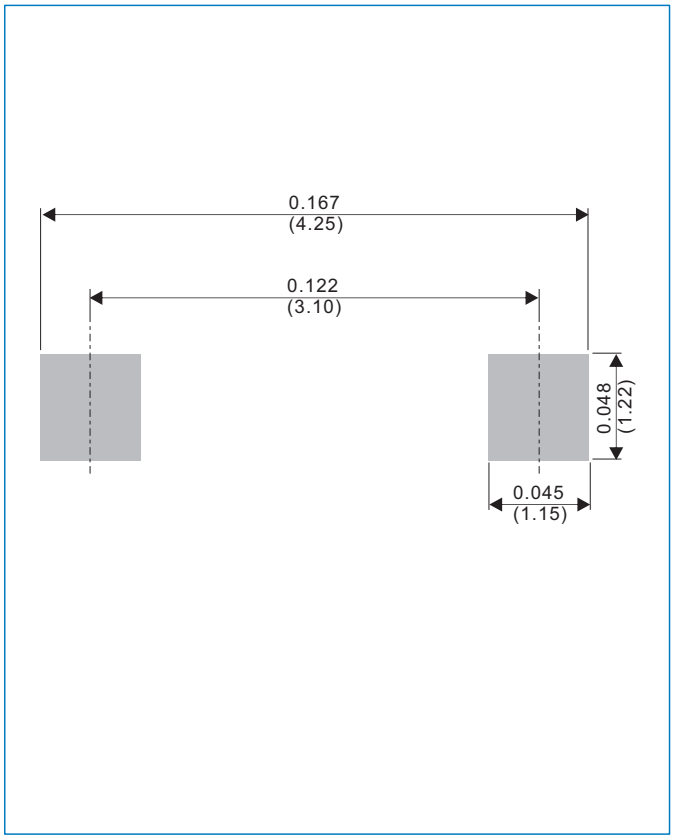


Fig.4- TYPICAL FORWARD CHARACTERISTIC

MBR1040VL

MOUNTING PAD LAYOUT

SOD-123FL Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

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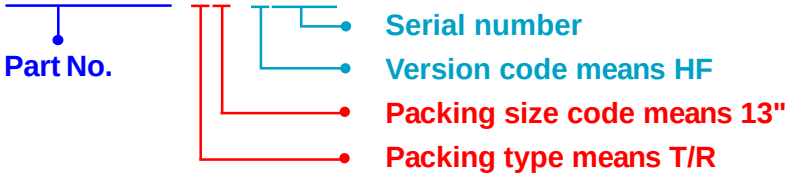
Part No_packing code_Version

MBR1040VL_R1_00001

MBR1040VL_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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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