



#### SURFACE MOUNT SCHOTTKY BARRIER

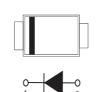
VOLTAGE 20 to 40 Volt CURRENT 0.5 Ampere

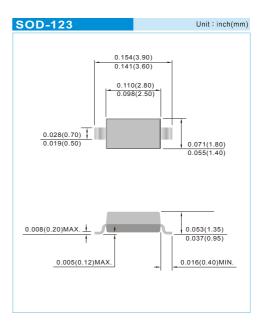
#### **FEATURES**

- · Low turn-on voltage
- · Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- · Lead free in compliance with EU RoHS 2.0
- · Green molding compound as per IEC 61249 standard

#### **MECHANICAL DATA**

- · Case: SOD-123, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- · Approx. Weight: 0.0004 ounces, 0.01 grams





#### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS0520	SS0530	SS0540	UNITS
Marking Code		B2	В3	B4	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	٧
Maximum Average Forward Current at TA=75°C	I <sub>AV</sub>	0.5			А
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I FSM	5.5			Α
Power Dissipation (Mounted on 48cm <sup>2</sup> FR-4 PCB)	P <sub>D</sub>	300			mW
Typical Junction Capacitance at $V_R$ =0V DC	C,	170			pF
Typical Thermal Resistance	$R_{_{ heta JA}}$	150 206			°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125			°C

#### ELECTRICAL CHARACTERISTICS (T<sub>4</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS0520	SS0530	SS0540	UNITS
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.3@ 0.1A 0.385@ 0.5A	0.375@ 0.1A 0.430@ 0.5A	0.51@ 0.5A 0.62@1.0A	٧
Maximum Reverse Current	I <sub>R</sub>	75@VR=10V	20@VR=15V	10@VR=20V	uA





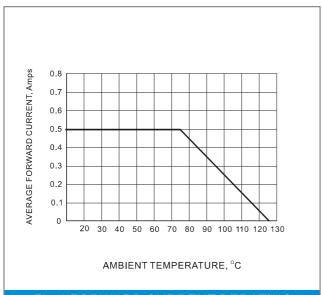


Fig. 1 FORWARD CURRENT DERATING

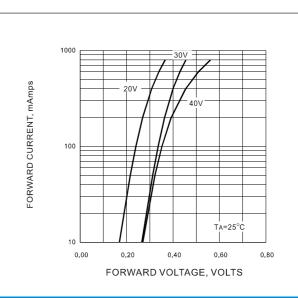


Fig.2 TYPICAL FORWARD VOLTAGE

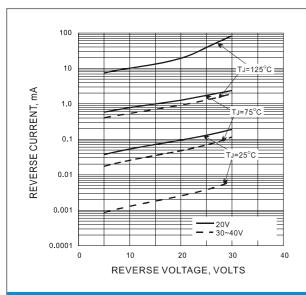


Fig.3 TYPICAL REVERSE CURRENT

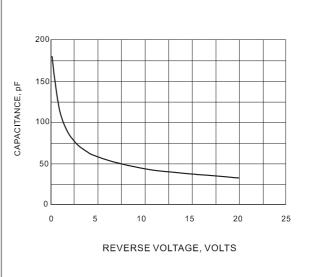
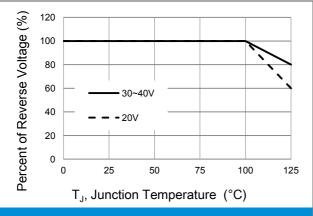


Fig.4 TYPICAL JUNCTION CAPACITANC

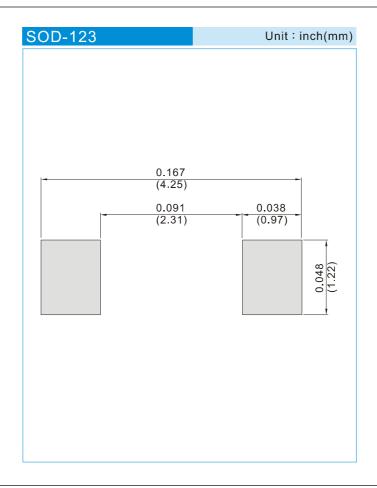


**Fig.5 Operating Temperature Derating Curve** 





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

· Packing information

T/R - 10K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





## Part No\_packing code\_Version

SS0520\_R1\_00001 SS0520\_R2\_00001

## For example:



Packing Code XX			Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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			





## **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.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by Panjit manufacturer:

Other Similar products are found below:

MA4E2039 D1FH3-5063 MBR0530L-TP MBR10100CT-BP MBR1545CT MMBD301M3T5G RB160M-50TR RB551V-30

BAS16E6433HTMA1 BAT 54-02LRH E6327 NSR05F40QNXT5G JANS1N6640 SB07-03C-TB-H SB1003M3-TL-W SK310-T SK32A-LTP SK34B-TP SS3003CH-TL-E GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G SB007-03C-TB-E SK32A-TP SK33B-TP SK38B-TP NRVBM120LT1G NTE505 NTSB30U100CT-1G SS15E-TP ACDBA1100LR-HF ACDBA1200-HF ACDBA140-HF ACDBA2100-HF ACDBA3100-HF CDBQC0530L-HF CDBQC0240LR-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP MA4E2502L-1246 MA4E2502H-1246 NRVBM120ET1G NSR01L30MXT5G SB560 PMAD1108-LF SD103ATW-TP 1N5819T-G PDS1040Q-13 MBR3060FCTe3/TU