



#### SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volts POWER 30 mA

#### **FEATURES**

- Extremely Fast Switching Speed
- Surface mount package ideally suited for autmatic insertion
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

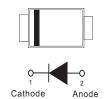
#### **MECHANICAL DATA**

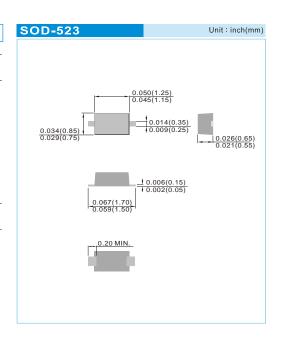
• Case : SOD-523 plastic

• Terminals : Solderable per MIL-STD-750, Method 2026

• Approx Weight: 0.0014 grams

• Marking : XR





#### **ABSOLUTE RATINGS**

Parameter	Symbol	Value	Units
Maximum Peak Reverse Voltage	VRRM	40	V
Reverse DC Voltage	VR	30	V
Average Forward Current	I F(AV)	30	mA
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I FSM	200	mA
Typical Junction Capacitance (VR=1V, f=1MHz)	Cı	2.5	pF
Thermal Resistance, Junction to Ambient (Note 1)	Roja	750	°C/W
Operating Junction and Storage Temperature Range	ТЈ,Тѕтс	-55 to +150	°C

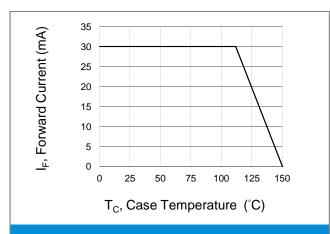
Note: 1. Mounted on an FR4 PCB, single-sided copper, mini pad.



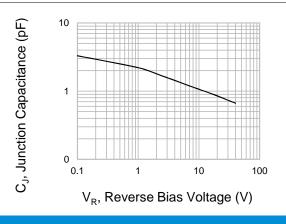


### ELECTRICAL CHARACTERISTICS ( $T_J = 25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Test Condition		Min.	Тур.	Max.	Units	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	T <sub>J</sub> =25°C	-	-	0.37	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		I <sub>F</sub> =1mA	T <sub>J</sub> =125°C	-	0.19	-	V	
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =30V		-	-	0.5	μΑ	



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

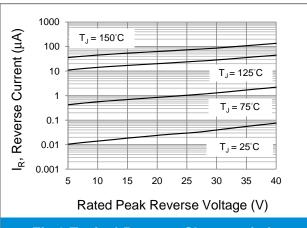


Fig.3 Typical Reverse Characteristics

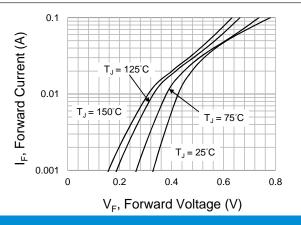
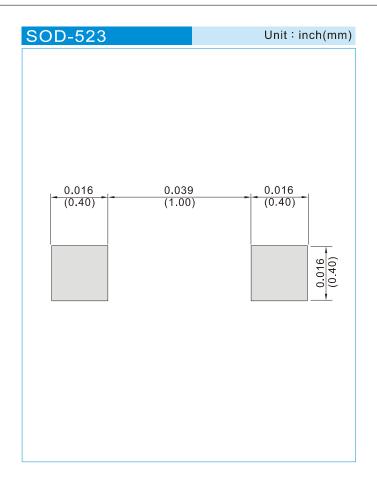


Fig.4 Typical Forward Characteristics





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel





## Part No\_packing code\_Version

RB751S40X\_R1\_00001 RB751S40X\_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)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	Ø	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	ш	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.