

FEATURES



MAXIMUM RATINGS(TA=25°C unless otherwise noted)

PARAMETER			VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage			45	V
Maximum RMS Voltage			32	V
Maximum DC Blocking Voltage			45	V
Maximum Average Rectified Output Current	per device per diode	I F(AV)	10 5	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load			80	Α
Typical Thermal Resistance		Reuc	8	∘C/W
Operating Junction Temperature Range And Storage Temperature Range		Тј,Тѕтс	-55 to + 150	°C

NOTE : 1.Mounted on 10cm x 10cm x 0.5mm copper pad area

ELECTRICAL CHARACTERISTICS (TA=25 C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	Vbr	I R=0.5mA	TA=25°C	45	-	-	V
Instantaneous forward voltage	VF		Ta=25°C	- - -	0.34 0.42 0.49	- - 0.54	V
		I F=1A I F=3A	T₄=125°C	-	0.26 0.39	-	V
Reverse current	l r	VR=36V		-	25	-	μΑ
		V _R =45V	TA=25°C TA=125°C	-	- 5	210	μA mA











T_J = 150°C

. T_J = 125°C

T_J = 75°C



Fig.2 Typical Junction Capacitance



Fig.4 Typical Forward Characteristics







SDM1045CS

6

100

10

1

0.1

0 0

25

50

75

T_J, Junction Temperature (°C)

Fig.5 Operating Temperature Derating Curve

100

125

150

Per Diode





SDM1045CS

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version	
SDM1045CS_S2_00001	TO-252	3K / 13" Reel	SDM1045CS	Halogen free	

Packaging Information & Mounting Pad Layout







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.