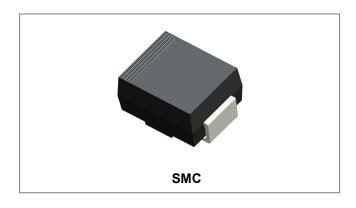






## **MURS340 ULTRAFAST RECTIFIERS**



#### **Features**

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### **Circuit Diagram**



### **Mechanical Data**

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.23grams(approx)

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic		Symbol	MURS340	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	400	V
Average Rectified Output Current	@T <sub>L</sub> = 145°C	lo	3.0	А
Non-Repetitive Peak Forward Surge 8.3ms Single half sine-wave superim rated load (JEDEC Method)		IFSM	75	А
Forward Voltage	@I <sub>F</sub> = 3.0A, T <sub>J</sub> =25°C	V <sub>FM1</sub>	1.5	V
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 100°C	I <sub>R</sub>	5.0 100	μA
Typical Thermal Resistance Junction to Ambient (Note 1)		R <sub>0JA</sub>	80	K/W
Maximum Reverse Recovery Time (Note 2)		Trr	35	ns
Operating and Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

Note: 1. Mounted on P.C. Board with 14mm<sup>2</sup> (0.13mm thick) copper pad.

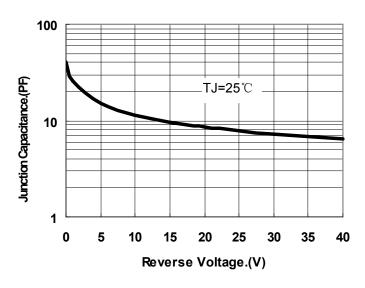
2. Measured with  $I_F$ =0.5A;  $I_R$ =1.0A;  $I_{RR}$ =0.25A.







### **Ratings and Characteristics Curves**



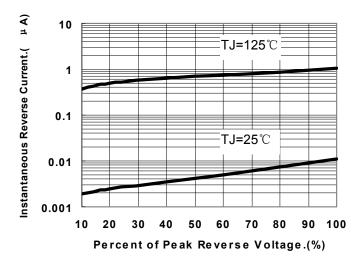


Fig.1-Typical Junction Capacitance

Fig.2-Typical Reverse Characteristics

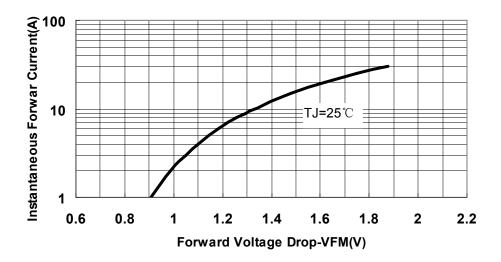


Fig.3-Typical Instantaneous Forward Voltage Characteristics

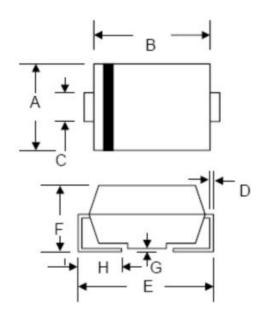
<sup>•</sup> http://www.smc-diodes.com - sales@ smc-diodes.com •







### **Mechanical Dimensions SMC**



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
Α	5.59	6.22	0.220	0.245
В	6.60	7.11	0.260	0.280
С	2.75	3.25	0.108	0.128
D	0.152	0.305	0.006	0.012
E	7.75	8.25	0.305	0.325
F	2.00	2.95	0.079	0.116
G	0.051	0.203	0.002	0.008
Н	0.76	1.60	0.030	0.063

# **Ordering Information**

Device	Package	Shipping	
MURS340	SMC (Pb-Free)	3000pcs / reel	

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

# **Marking Diagram**

U340 3 40 YY

Where XXXXX is YYWWL

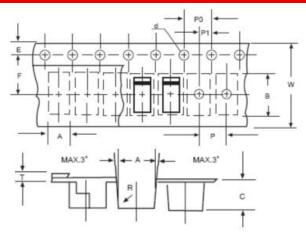
U = Device Type 3 = Forward Current (3A) 40 = Reverse Voltage (400V)

YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

# **Carrier Tape Specification SMC**



SYMBOL	Millimeters			
STWIBOL	Min.	Max.		
Α	5.90	6.10		
В	8.20	8.40		
С	2.40	2.60		
d	1.40	1.60		
Е	1.40	1.60		
F	7.60	7.70		
Р	7.90	8.10		
P0	3.90	4.10		
P1	3.90	4.10		
Т	-	0.600		
W	15.80	16.20		

- China Germany Korea Singapore United States
  - http://www.smc-diodes.com sales@ smc-diodes.com •







#### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..