

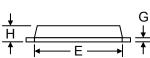
# 10A SURFACE MOUNT TRENCH MOS SCHOTTKY RECTIFIER

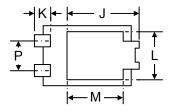


### **Features**

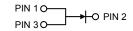
- Trench MOS Schottky Technology
- Low Profile Flatpack 1.1mm Case Height
- Extremely Fast Switching
- Low Forward Voltage Drop
- Low Conduction Losses
- Designed for Surface Mount Application
- Plastic Material UL Flammability 94V-0

# PIN 1 PIN 2 PIN 3 PIN 2





TO-277					
Dim	Min	Max			
Α	6.40	6.60			
В	3.80	4.10			
С	1.70	1.90			
D	0.80	1.00			
Е	5.20	5.50			
G	0.33	0.43			
Н	1.00	1.20			
J	4.35	4.65			
K	0.74 0.76				
L	3.10 Typical				
М	3.50	3.70			
Р	1.90 Typical				
All Dimensions in mm					



## **Mechanical Data**

• Case: TO-277, Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: See Diagram

Weight: 0.09 grams (approx.)

Mounting Position: Any

Marking: Device Code, See Page 3

Lead Free: For RoHS / Lead Free Version,
 Add "-LF" Suffix to Part Number, See Page 4

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

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	45	<b>V</b>
Average Rectified Output Current (Note 1) @T <sub>L</sub> = 120°C	lo	10	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	200	А
Thermal Resistance Junction to Lead (Note 1)	R JL	4.0	°C/W
Thermal Resistance Junction to Ambient (Note 2)	R JA	75	°C/W
Operating and Storage Temperature Range	Тл, Тѕтс	-40 to +150	°C

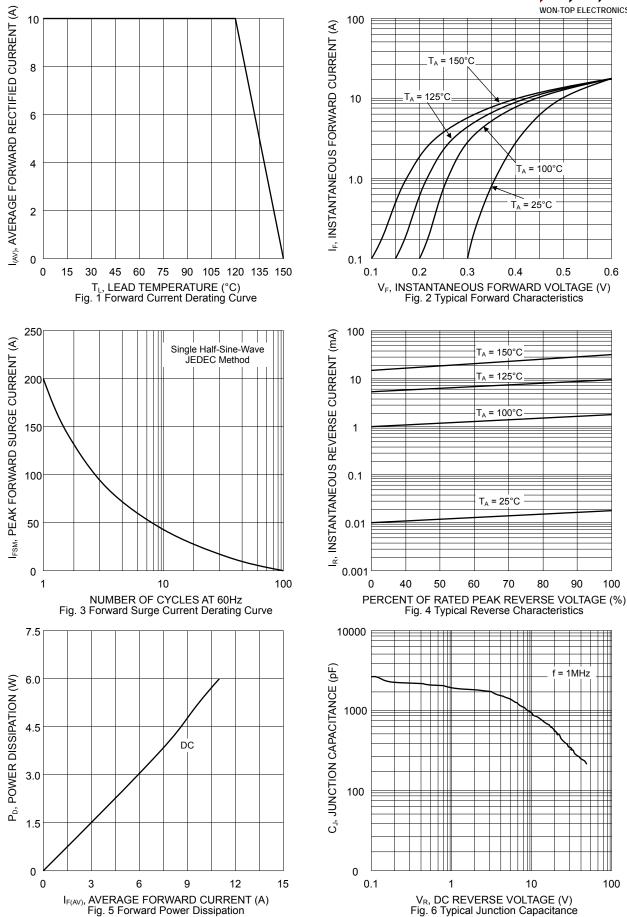
### Electrical Characteristics @TA=25°C unless otherwise specified

Characteristic	Test Conditions		Symbol	Тур	Max	Unit
	I <sub>F</sub> = 5.0A	T <sub>A</sub> = 25°C	VF	0.45	_	V
Forward Voltage	I <sub>F</sub> = 10A			0.48	0.51	
	I <sub>F</sub> = 5.0A	T <sub>A</sub> = 125°C		0.35		
	I <sub>F</sub> = 10A			0.41	_	
Reverse Leakage Current (Note 3)	V <sub>R</sub> = 45V	T <sub>A</sub> = 25°C	lR	0.05	0.80	- mA
Reverse Leakage Current (Note 3)	v <sub>R</sub> – 45V	T <sub>A</sub> = 125°C		9	35	

Note: 1. Mounted on aluminum substrate PC board with 30mm x 30mm pad area.

- 2. Mounted on FR-4 PC board with minimum recommended pad area.
- 3. Pulse width ≤ 40ms.

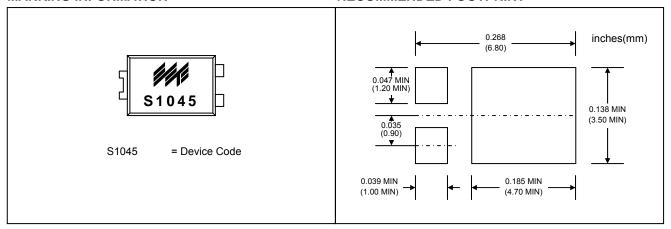






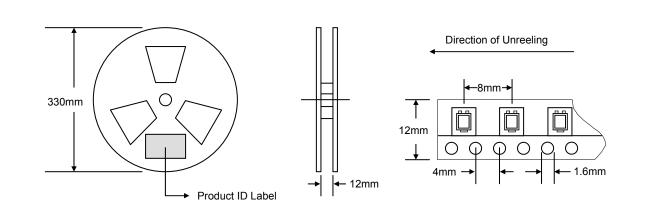
# **MARKING INFORMATION**

# **RECOMMENDED FOOTPRINT**



### **PACKAGING INFORMATION**





Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	18.0

Note: 1. Paper reel, white or gray color.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.



### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity		
TMS1045-T3	TO-277	3000/Tape & Reel		

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, TMS1045-T3-LF.

WON-TOP ELECTRONICS and are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd. No. 44 Yu Kang North 3rd Road,

Chine Chen Dist., Kaohsiung 806, Taiwan **Phone:** 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

We power your everyday.