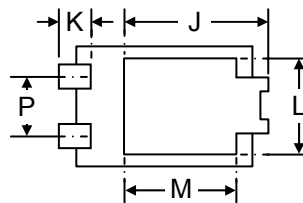
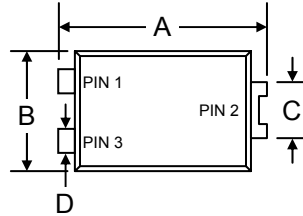


### Features

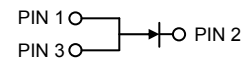
- **Trench MOS Schottky Technology**
- **Low Profile Flatpack 1.1mm Case Height**
- Extremely Fast Switching
- Low Forward Voltage Drop
- Low Conduction Losses
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 94V-0

### 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**



TO-277		
Dim	Min	Max
A	6.40	6.60
B	3.80	4.10
C	1.70	1.90
D	0.80	1.00
E	5.20	5.50
G	0.33	0.43
H	1.00	1.20
J	4.35	4.65
K	0.74	0.76
L	3.10 Typical	
M	3.50	3.70
P	1.90 Typical	
All Dimensions in mm		



### Maximum Ratings @ $T_A=25^\circ\text{C}$ 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	$V_{RRM}$ $V_{RWM}$ $V_R$	100	V
Average Rectified Output Current (Note 1) @ $T_L = 125^\circ\text{C}$	$I_O$	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	150	A
Thermal Resistance Junction to Lead (Note 1)	$R_{JL}$	3.0	$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient (Note 2)	$R_{JA}$	60	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

### Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Test Conditions		Symbol	Typ	Max	Unit
	$I_F$	$T_A$				
Forward Voltage (Note 3)	$I_F = 5.0\text{A}$	$T_A = 25^\circ\text{C}$	$V_F$	0.56	—	V
	$I_F = 10\text{A}$			0.65		
	$I_F = 5.0\text{A}$	$T_A = 125^\circ\text{C}$		0.48	—	
	$I_F = 10\text{A}$			0.56	—	
Reverse Leakage Current (Note 4)	$V_R = 100\text{V}$	$T_A = 25^\circ\text{C}$	$I_R$	—	0.10	mA
		$T_A = 125^\circ\text{C}$		9.3	—	

- 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  $\leq 300\mu\text{s}$ , 1% duty cycle.  
 4. Pulse width  $\leq 40\text{ms}$ .

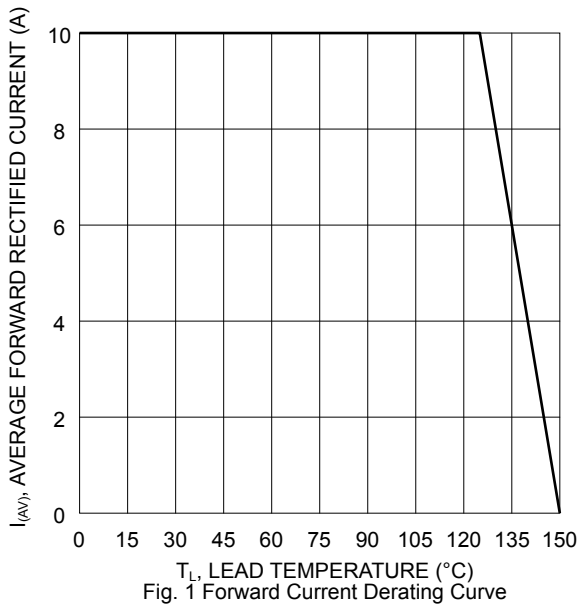


Fig. 1 Forward Current Derating Curve

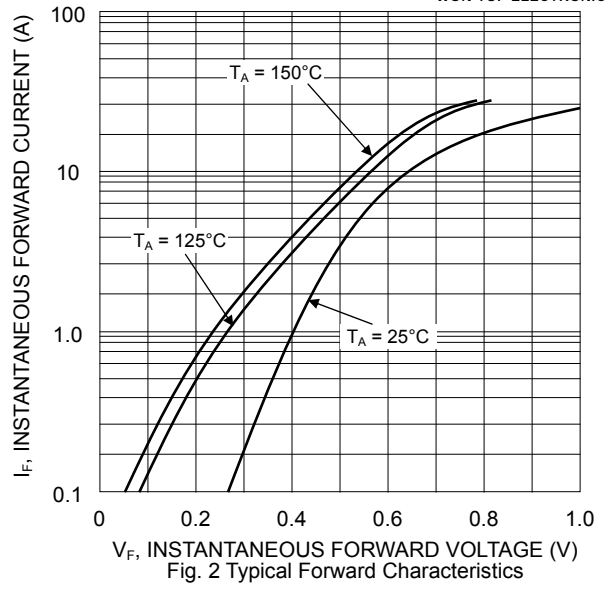


Fig. 2 Typical Forward Characteristics

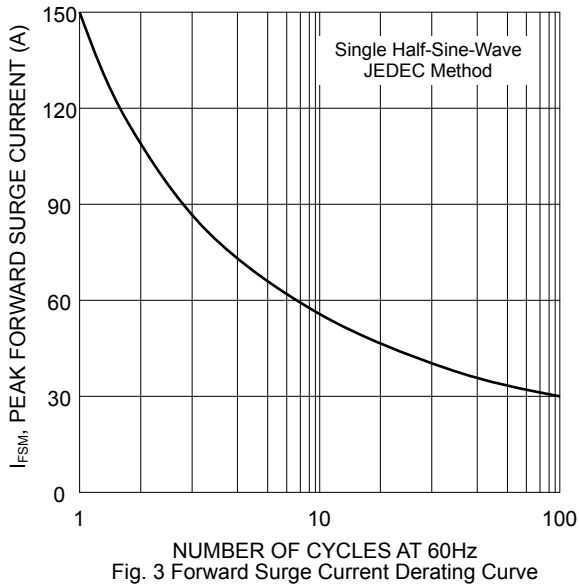


Fig. 3 Forward Surge Current Derating Curve

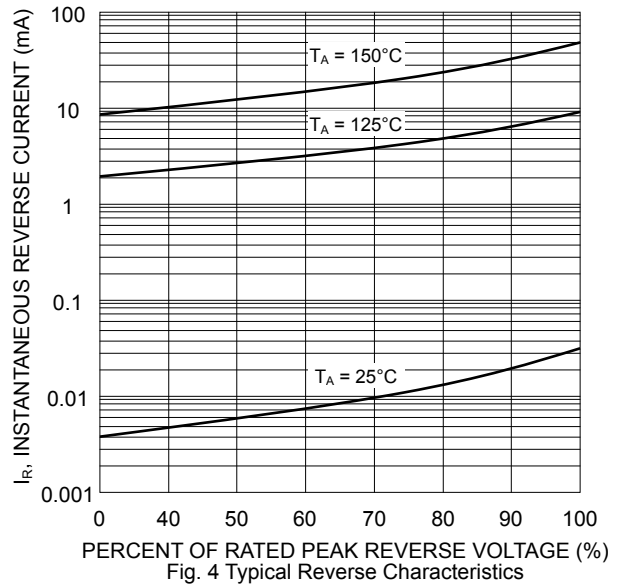


Fig. 4 Typical Reverse Characteristics

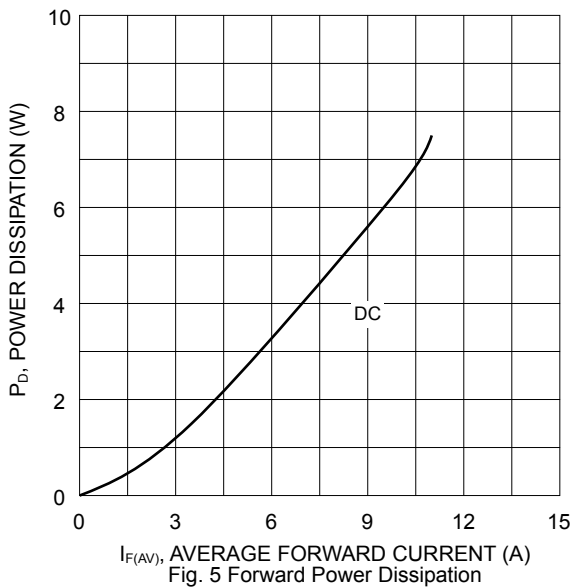


Fig. 5 Forward Power Dissipation

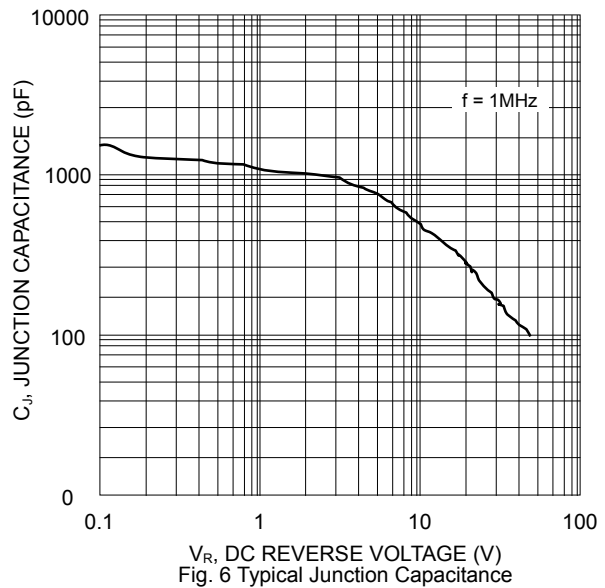
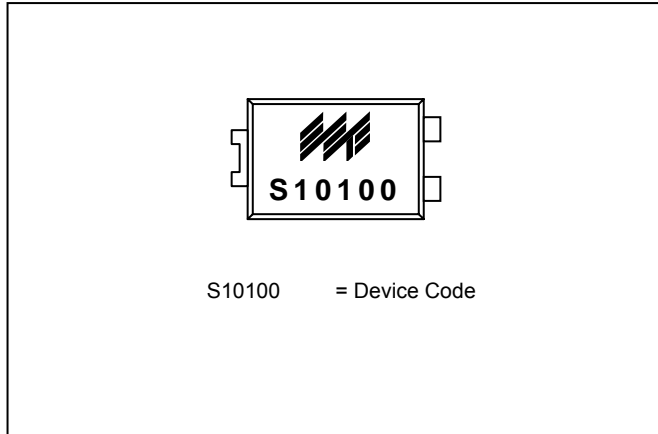
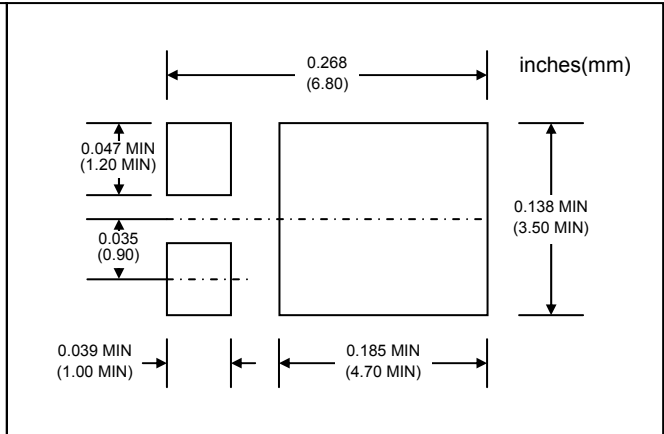


Fig. 6 Typical Junction Capacitance

## MARKING INFORMATION

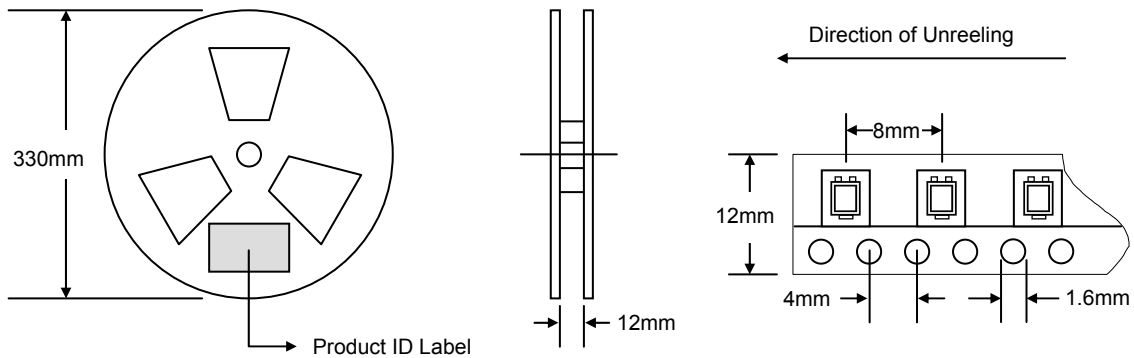


## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

### TAPE & REEL




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

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
TMS10100-T3	TO-277	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, TMS10100-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.*