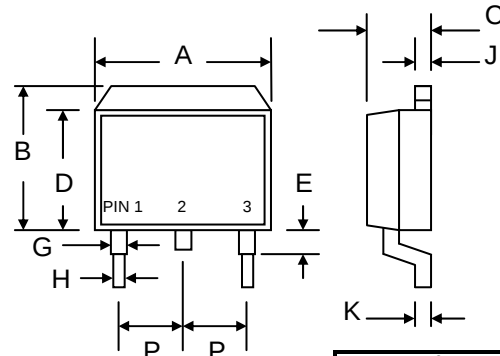


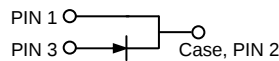
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Super-Fast Recovery Time
- High Voltage Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in High Voltage, High Frequency Inverters, Free Wheeling, and Switching Power Supplies



Mechanical Data

- Case: D²PAK/TO-263, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.7 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**



D ² PAK/TO-263		
Dim	Min	Max
A	9.80	10.40
B	9.60	10.60
C	4.40	4.80
D	8.50	9.10
E	—	2.80
G	1.00	1.40
H	—	0.99
J	1.20	1.40
K	0.30	0.70
P	2.35	2.75
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	MURB1620	MURB1630	MURB1640	MURB1660	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	200	300	400	600	V
RMS Reverse Voltage	V _{R(RMS)}	140	210	280	420	V
Average Rectified Output Current @T _C = 100°C	I _O	16				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	250				A
Forward Voltage @I _F = 16A	V _{FM}	0.975	1.3	1.5		V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 100°C	I _{RM}	10 500				μA
Reverse Recovery Time (Note 1)	t _{rr}	35	50			nS
Typical Junction Capacitance (Note 2)	C _J	175			145	pF
Thermal Resistance Junction to Ambient Thermal Resistance Junction to Case	R _{θJA} R _{θJC}	73 1.2				°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175				°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

MURB1620 – MURB1660

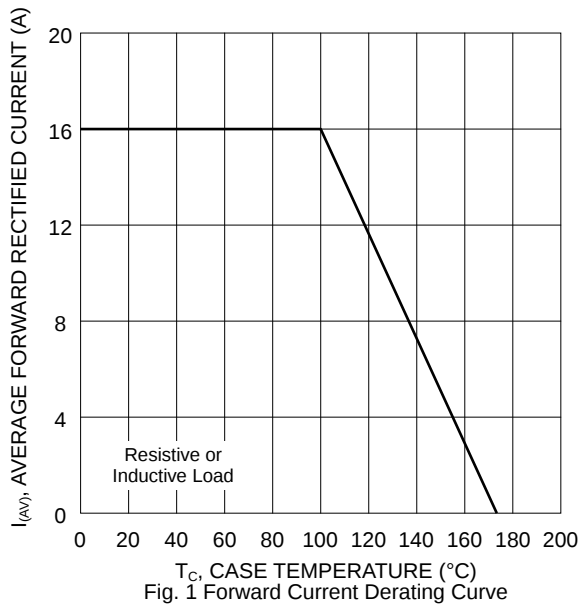


Fig. 1 Forward Current Derating Curve

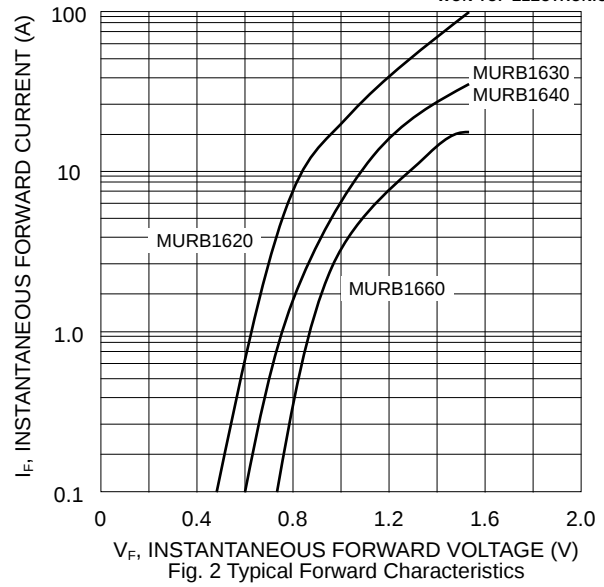


Fig. 2 Typical Forward Characteristics

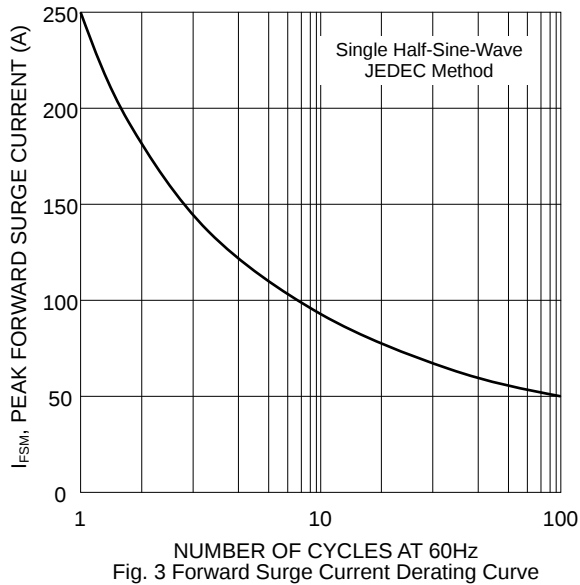


Fig. 3 Forward Surge Current Derating Curve

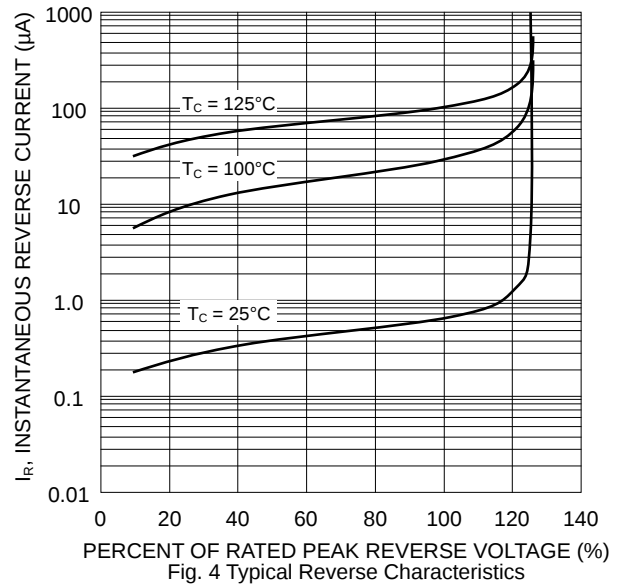


Fig. 4 Typical Reverse Characteristics

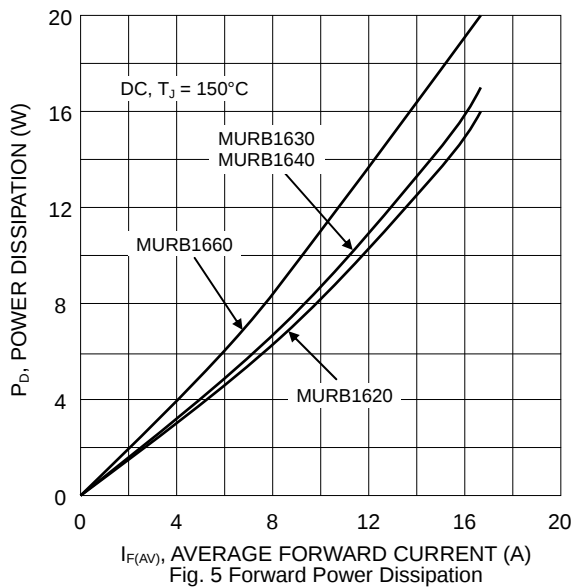


Fig. 5 Forward Power Dissipation

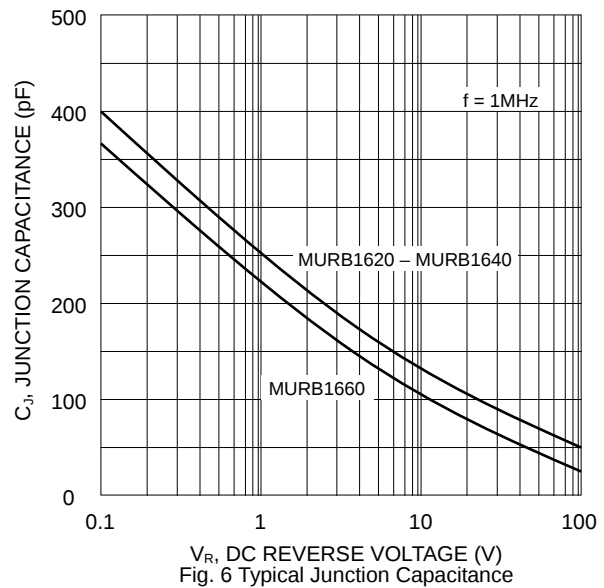
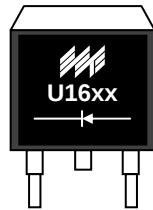


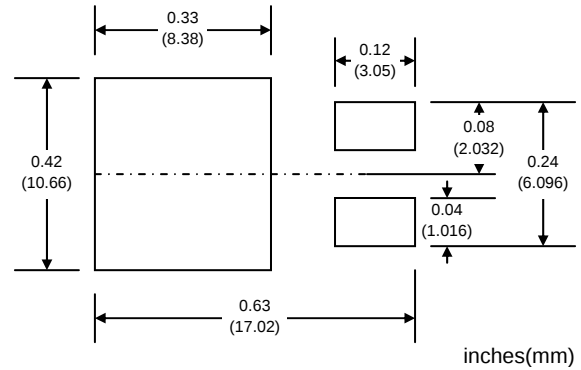
Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



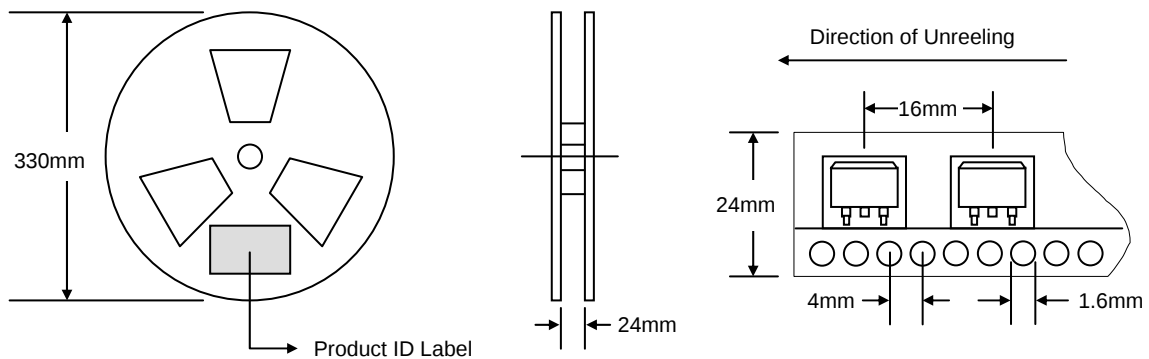
U16xx = Device Number
 xx = 20 (MURB1620)
 30 (MURB1630)
 40 (MURB1640)
 60 (MURB1660)
 Polarity = As Marked on Body

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	800	340 x 337 x 45	800	370 x 370 x 420	6,400	15.0

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
MURB1620-T3	D ² PAK	800/Tape & Reel
MURB1630-T3	D ² PAK	800/Tape & Reel
MURB1640-T3	D ² PAK	800/Tape & Reel
MURB1660-T3	D ² PAK	800/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, MURB1620-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.