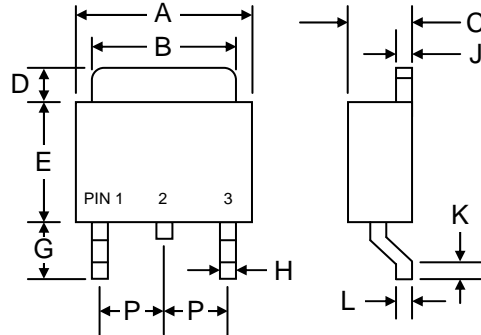


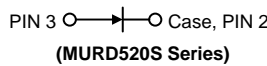
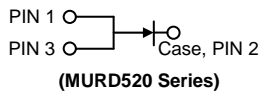
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Profile Package
- High Surge Current Capability
- Low Power Loss, High Efficiency
- Super-Fast Recovery Time
- Ideally Suited for Use in High Frequency SMPS, Inverters, and As Free Wheeling Diodes



Mechanical Data

- Case: DPAK/TO-252, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.3 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**



DPAK/TO-252		
Dim	Min	Max
A	6.05	6.70
B	5.05	5.55
C	2.10	2.50
D	1.05	1.25
E	5.48	6.20
G	2.55	3.40
H	0.55	0.90
J	0.40	0.60
K	0.95	1.60
L	0.45	0.55
P	2.30 Typical	
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	MURD520/S	MURD530/S	MURD540/S	MURD560/S	Unit
Peak Repetitive Reverse Voltage	V _{RRM}					
Working Peak Reverse Voltage	V _{RWM}	200	300	400	600	V
DC Blocking Voltage	V _R					
RMS Reverse Voltage	V _{R(RMS)}	140	210	280	420	V
Average Rectified Output Current @T _C = 100°C	I _O	5.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	75				A
Forward Voltage @I _F = 5.0A	V _{FM}	0.95	1.25		1.7	V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0				μA
At Rated DC Blocking Voltage @T _A = 100°C		500				
Reverse Recovery Time (Note 1)	t _{rr}	35				nS
Typical Junction Capacitance (Note 2)	C _J	45				pF
Thermal Resistance Junction to Ambient (Note 3)	R _{JA}	49				°C/W
Thermal Resistance Junction to Lead (Note 3)	R _{JC}	2.0				
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150				°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 4.0 V DC.
 3. Mounted on PCB with 700mm² copper pads.

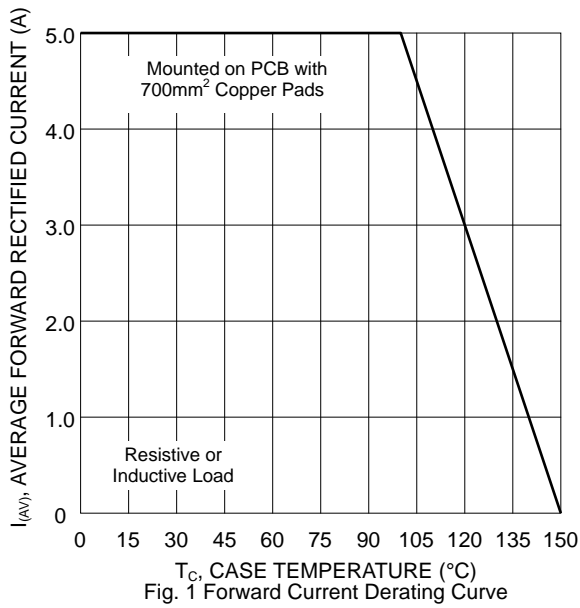


Fig. 1 Forward Current Derating Curve

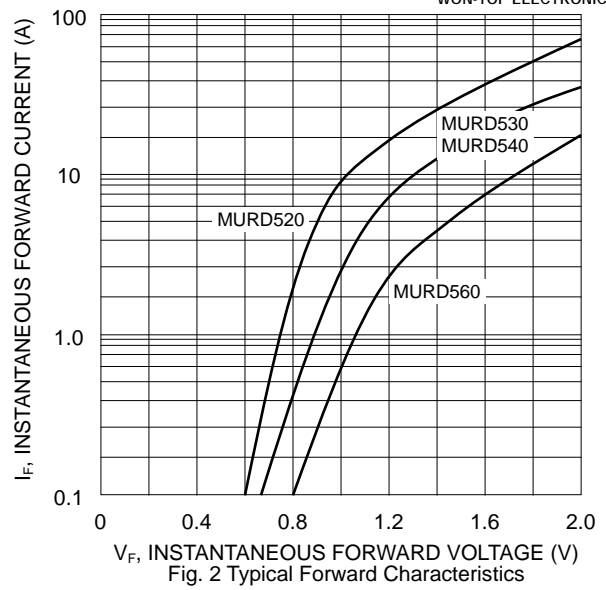


Fig. 2 Typical Forward Characteristics

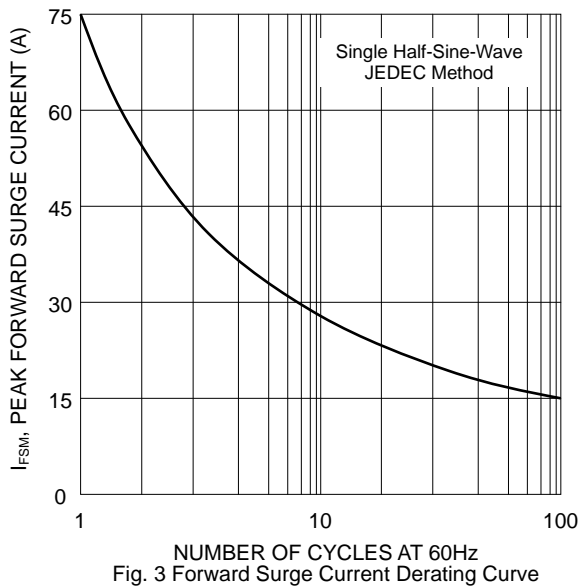


Fig. 3 Forward Surge Current Derating Curve

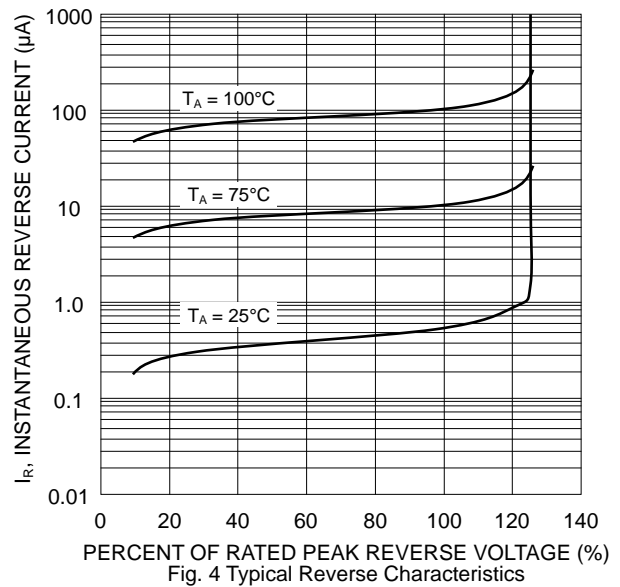


Fig. 4 Typical Reverse Characteristics

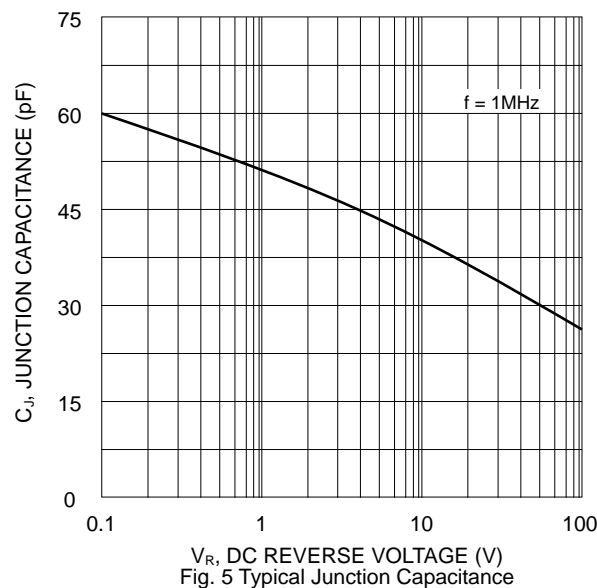


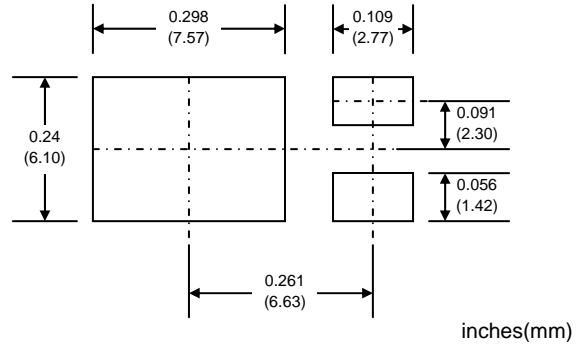
Fig. 5 Typical Junction Capacitance

MARKING INFORMATION



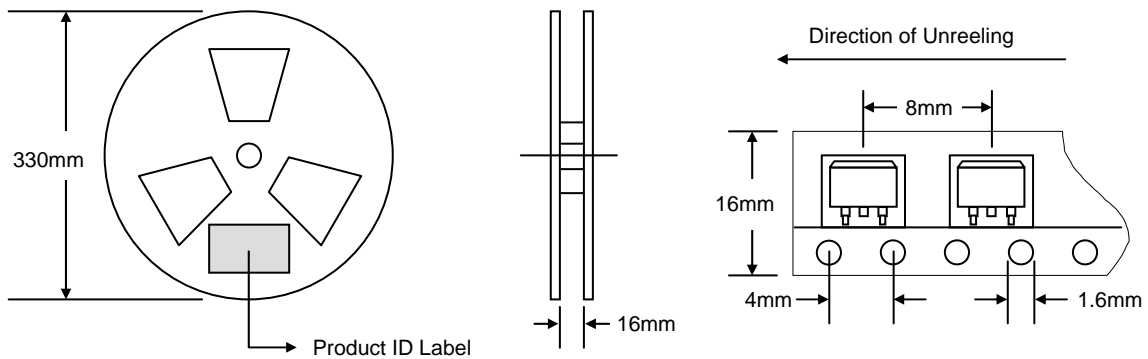
U5xx = Device Number
 xx = 20 (MURD520)
 30 (MURD530)
 40 (MURD540)
 60 (MURD560)
 S = Suffix for MURD520S Series (remove when ordering MURD520 series)

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	2,500	340 x 337 x 45	5,000	370 x 370 x 420	40,000	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
MURD520/S-T3	DPAK	2500/Tape & Reel
MURD530/S-T3	DPAK	2500/Tape & Reel
MURD540/S-T3	DPAK	2500/Tape & Reel
MURD560/S-T3	DPAK	2500/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, MURD520-T3-LF.**

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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.