

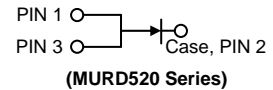
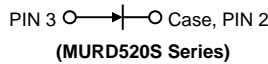
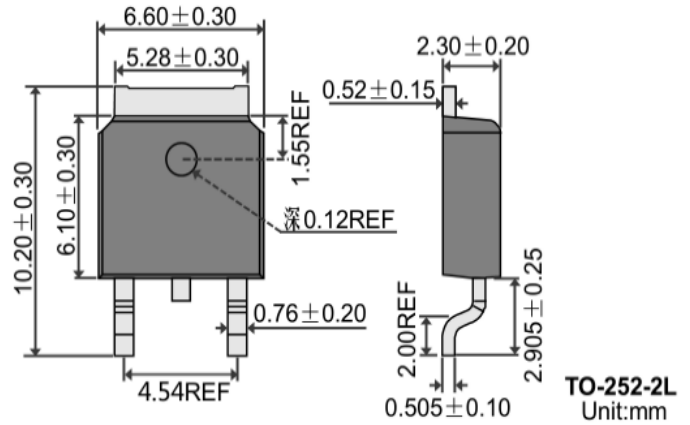
Features

- Fred Chip Planar 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**

DPAK/TO-252

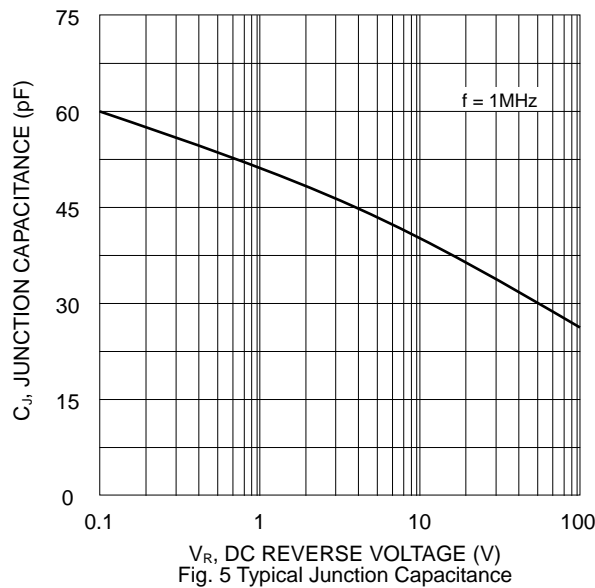
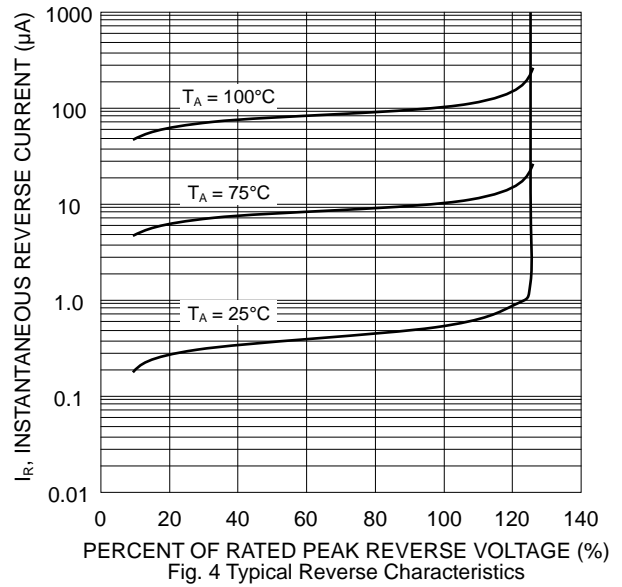
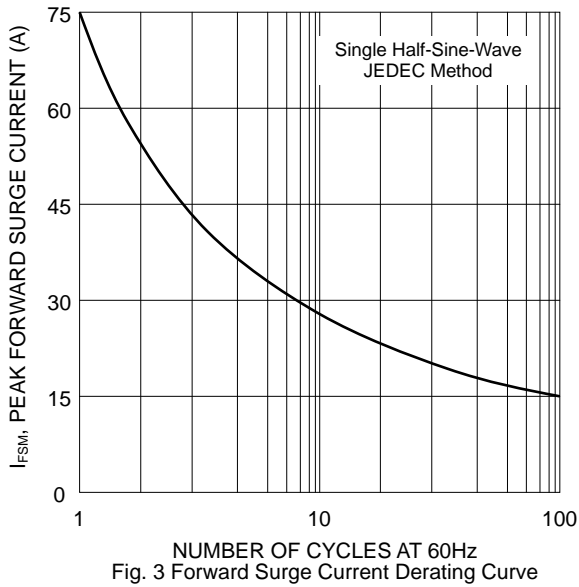
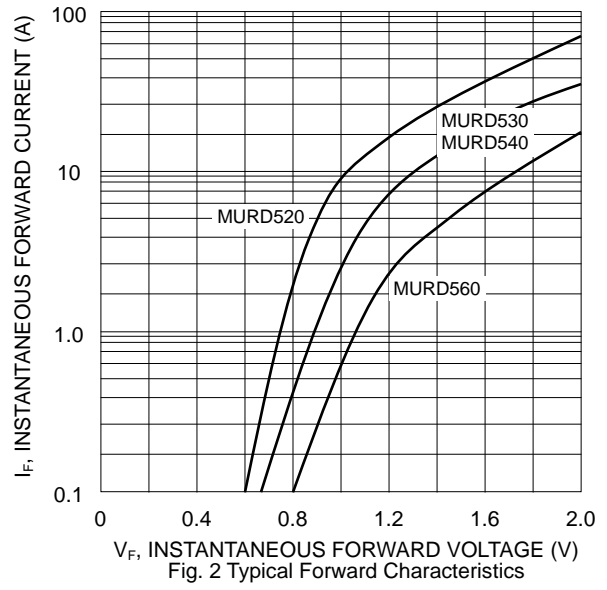
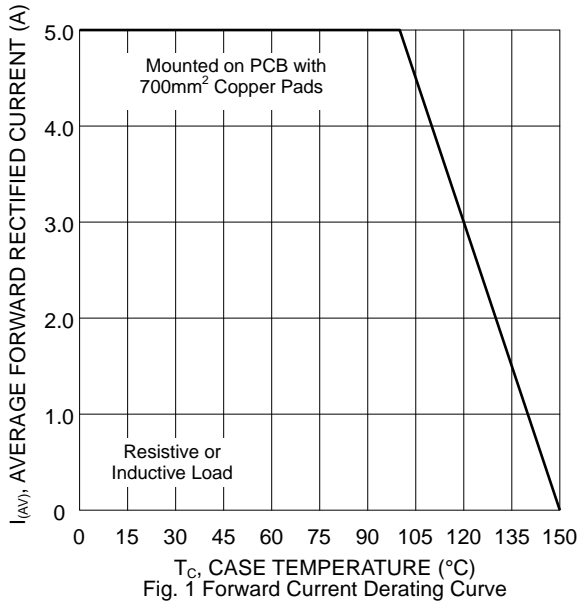


Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

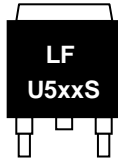
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	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 @ $T_C = 100^\circ\text{C}$	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 @ $I_F = 5.0\text{A}$	V_{FM}	0.95	1.25		1.7	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	5.0 500				μA
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				$^\circ\text{C/W}$
Thermal Resistance Junction to Lead (Note 3)	R_{JC}	2.0				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150				$^\circ\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on PCB with 700mm² copper pads.

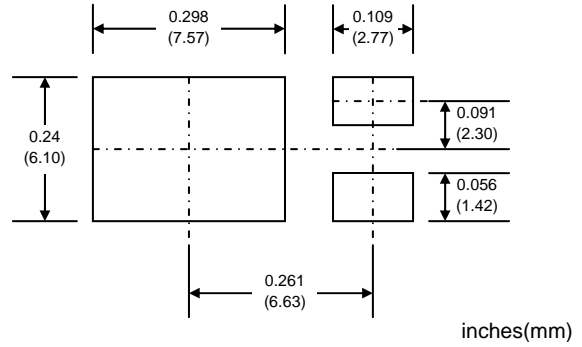


MARKING INFORMATION



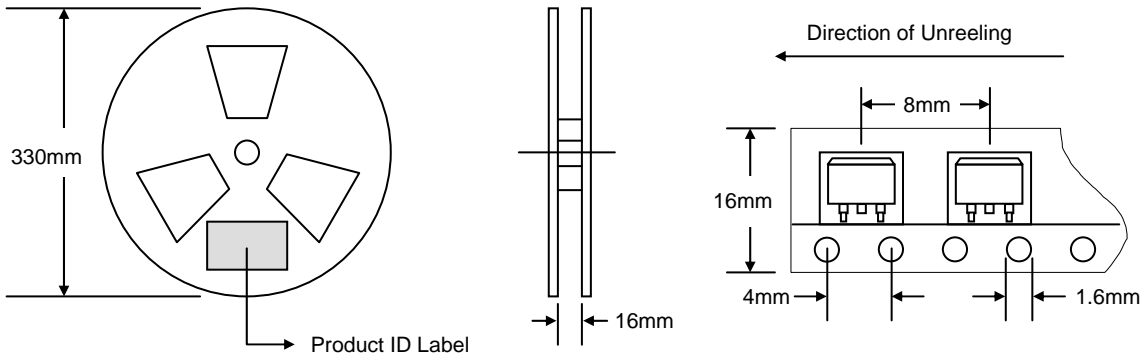
U5xx = Device Number
 xx = 20 (MURD520)
 30 (MURD530)
 40 (MURD540)
 60 (MURD560)
 S = Suffix for MURD520S Series (remove when ordering MURD520 series)

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.