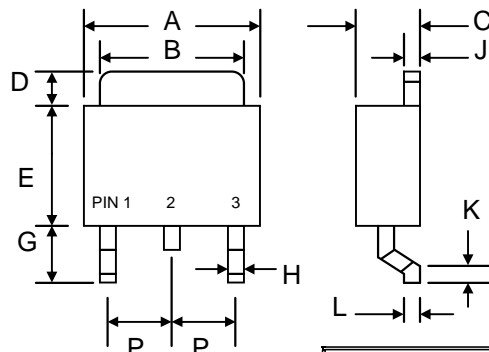


## Super fast Rectifier

### Reverse Voltage 200 to 600 Volts, Forward Current 10Ampers

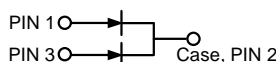
#### Features

- 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: TO-252/DPAK, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.3 grams (approx.)
- Mounting Position: Any



TO-252/DPAK		
Dim	Min	Max
A	6.05	6.65
B	5.05	5.55
C	2.25	2.40
D	1.05	1.25
E	5.48	6.08
G	2.55	3.00
H	0.55	0.90
J	0.49	0.55
K	0.95	1.25
L	0.49	0.55
P	2.30 Typical	
All Dimensions in mm		

#### Maximum Ratings and Electrical Characteristics (@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%.

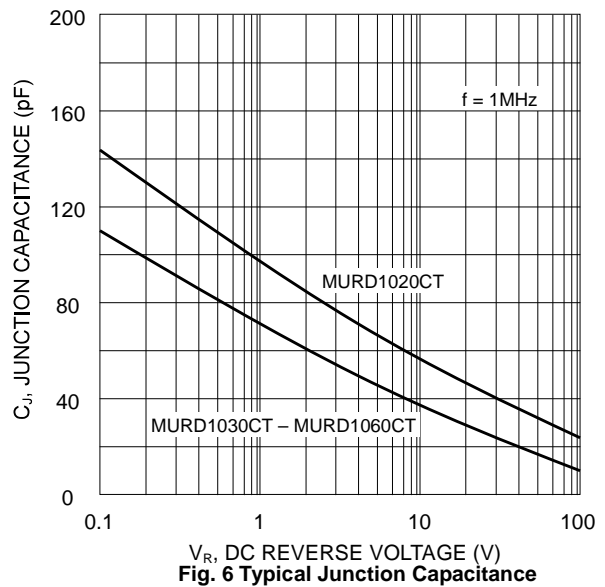
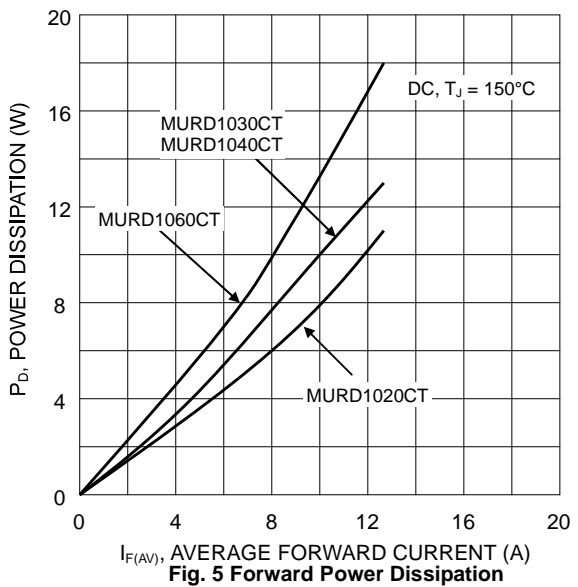
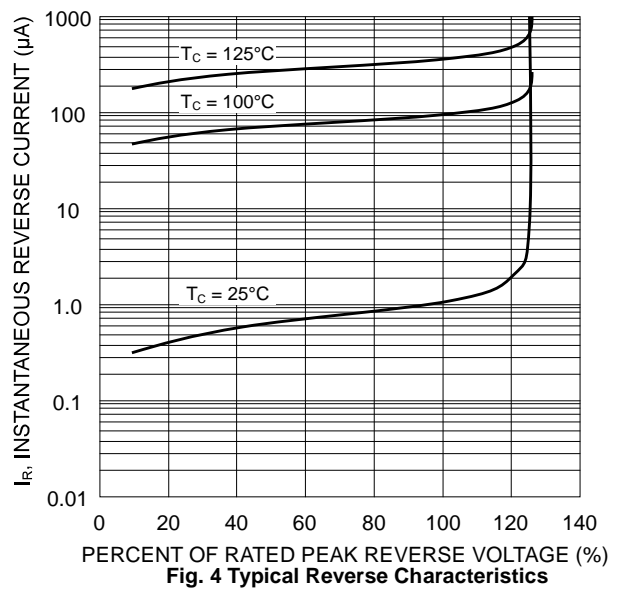
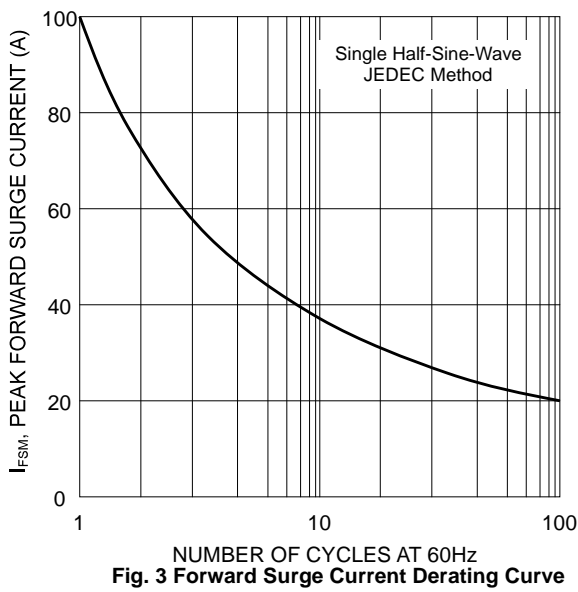
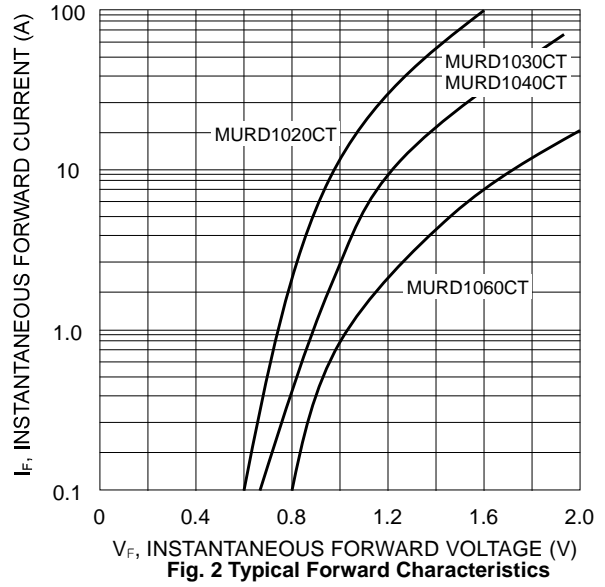
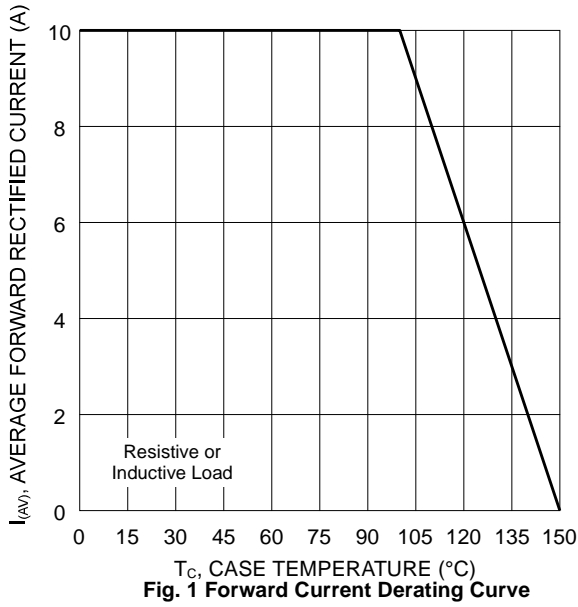
Characteristic	Symbol	MURD 1020CT	MURD 1030CT	MURD 1040CT	MURD 1060CT	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>					V
Working Peak Reverse Voltage	V <sub>RWM</sub>	200	300	400	600	
DC Blocking Voltage	V <sub>R</sub>					
RMS Reverse Voltage	V <sub>R(RMS)</sub>	140	210	280	420	V
Average Rectified Output Current @T <sub>C</sub> = 100°C	I <sub>O</sub>		10 5.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>		100			A
Forward Voltage per diode @I <sub>F</sub> = 5.0A	V <sub>FM</sub>	0.95	1.3		1.7	V
Peak Reverse Current At Rated DC Blocking Voltage @T <sub>C</sub> = 25°C @T <sub>C</sub> = 100°C	I <sub>RM</sub>		10 500			μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	35		50		nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	70		50		pF
Thermal Resistance Junction to Ambient (Note 3)	R <sub>θJA</sub>		80			°C/W
Thermal Resistance Junction to Lead (Note 3)	R <sub>θJC</sub>		6.5			
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>		-55 to +150			°C

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on PCB with minimum recommended pad sizes per diode.



# MURD1020CT ~ MURD1060CT

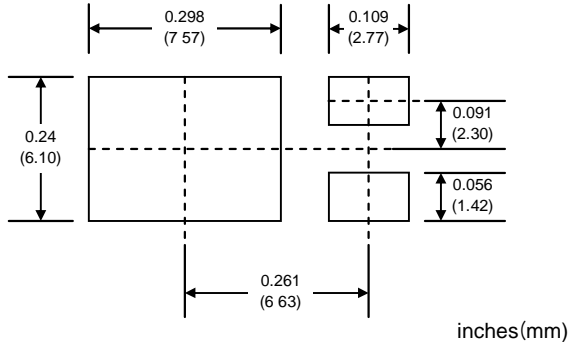
## Ratings and Characteristics Curves





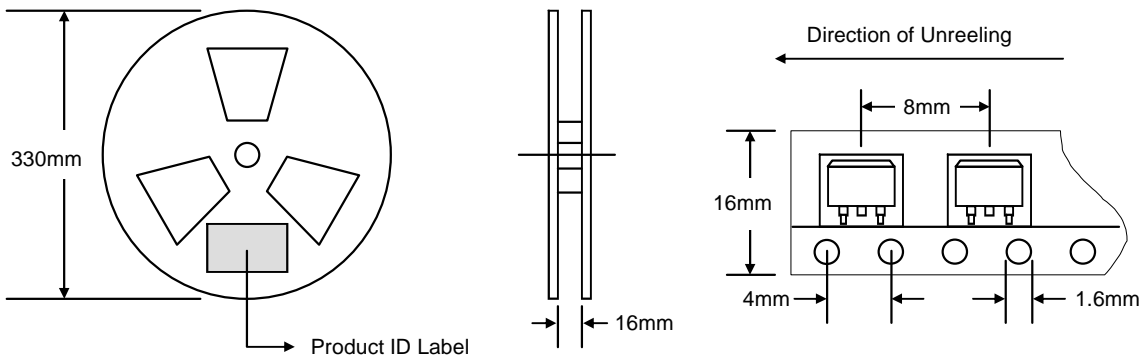
# MURD1020CT ~ MURD1060CT

## 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.