

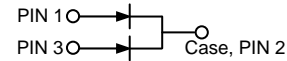
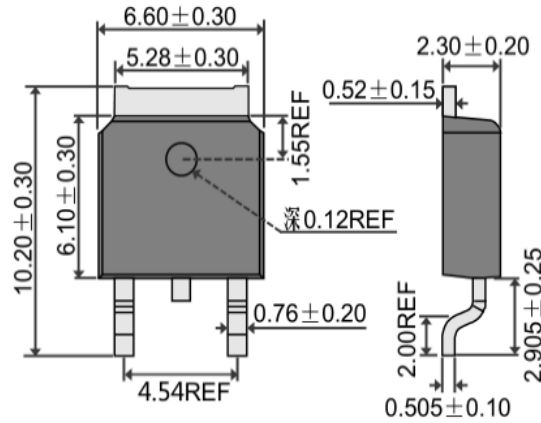
Features

- 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°C unless otherwise specified

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

Characteristic	Symbol	MURD620CT	MURD630CT	MURD640CT	MURD660CT	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		6.0 3.0			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 per diode @ _{I_F} = 3.0A	V_{FM}	0.95	1.3		1.7	V
Peak Reverse Current At Rated DC Blocking Voltage	I_{RM}			10 500		μA
Reverse Recovery Time (Note 1)	t_{rr}		35			nS
Typical Junction Capacitance (Note 2)	C_J	85		50		pF
Thermal Resistance Junction to Ambient (Note 3)	R_{JA}			80		°C/W
Thermal Resistance Junction to Lead (Note 3)	R_{JC}			9.0		
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 minimum recommended pad sizes per diode.



MURD620CT – MURD660CT

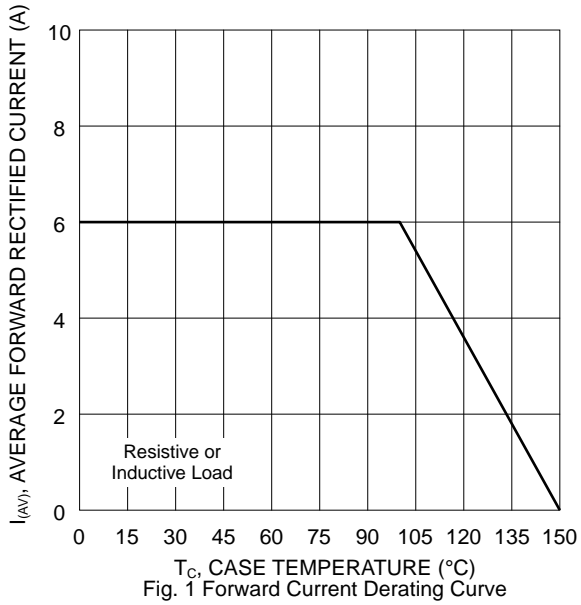


Fig. 1 Forward Current Derating Curve

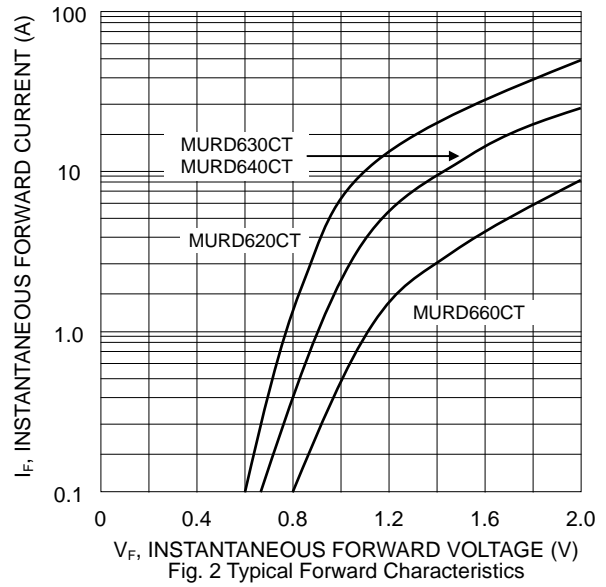


Fig. 2 Typical Forward Characteristics

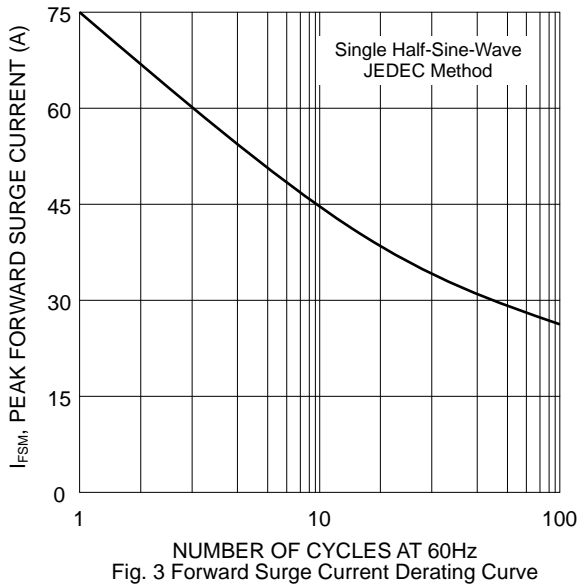


Fig. 3 Forward Surge Current Derating Curve

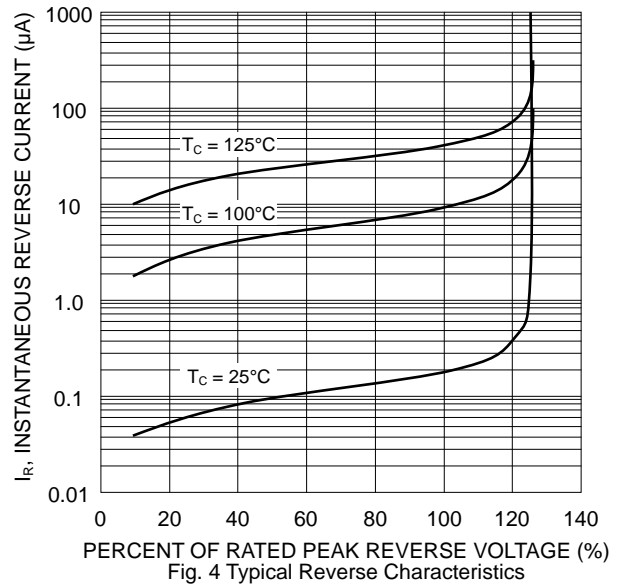


Fig. 4 Typical Reverse Characteristics

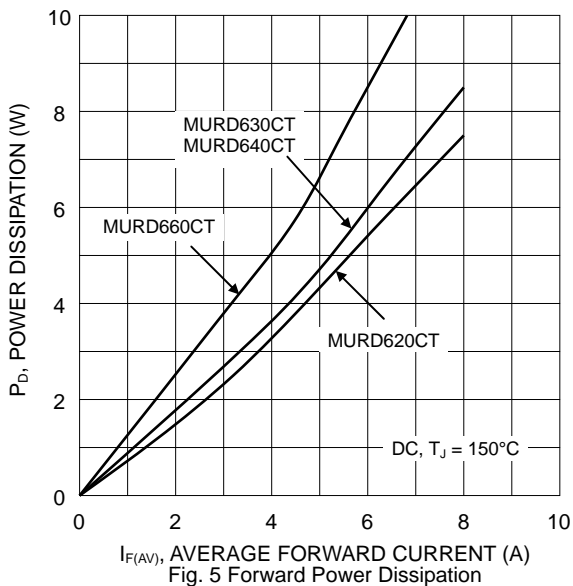


Fig. 5 Forward Power Dissipation

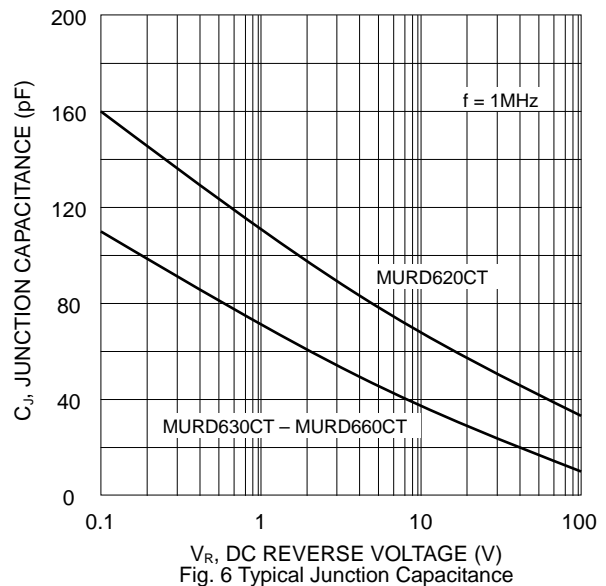
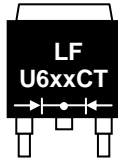


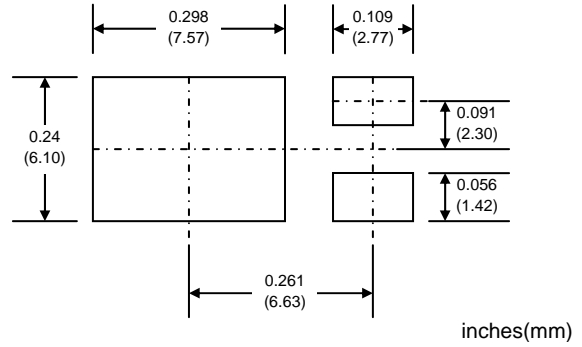
Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



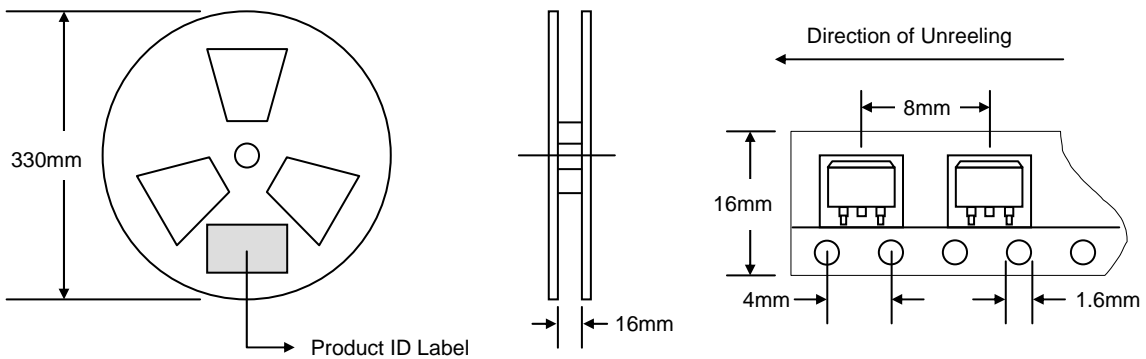
U6xxCT = Device Number
 xx = 20 (MURD620CT)
 30 (MURD630CT)
 40 (MURD640CT)
 60 (MURD660CT)
 Polarity = As Marked on Body

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	2,500	340 x 337 x 45	5,000	370 x 370 x 420	40,000	18.0