LiKun-micro electronics

MURB3020CT – MURB3060CT

30A SURFACE MOUNT GLASS PASSIVATED DUAL SUPERFAST RECTIFIER

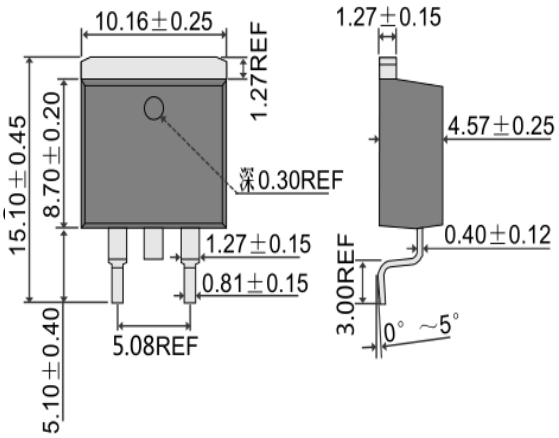
Features

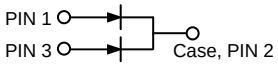
- Fred Chip Planar Construction
- Ideally Suited for Automatic Assembly
- Super-Fast Recovery Time
- High Voltage Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in High Voltage, High Frequency Inverters, Free Wheeling, and Switching Power Supplies

Mechanical Data

- Case: D^{2}PAK/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**

D^{2}PAK/TO-263





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	MURB 3020CT	MURB 3030CT	MURB 3040CT	MURB 3060CT	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 Total Device @T_C = 110°C Per Diode	I_O	30 15				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	200				A
Forward Voltage per diode @I_F = 15A	V_{FM}	1.05	1.25		1.7	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 per diode Thermal Resistance Junction to Case per diode	$R_{\theta JA}$ $R_{\theta JC}$	60 2.4				°C/W
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 4.0V D.C.

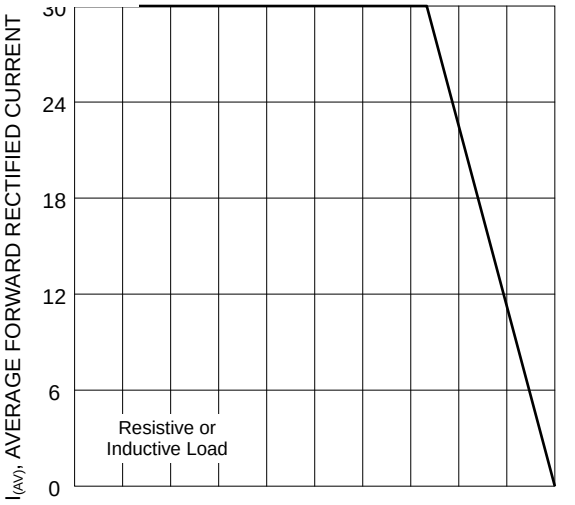


Fig. 1 Forward Current Derating Curve

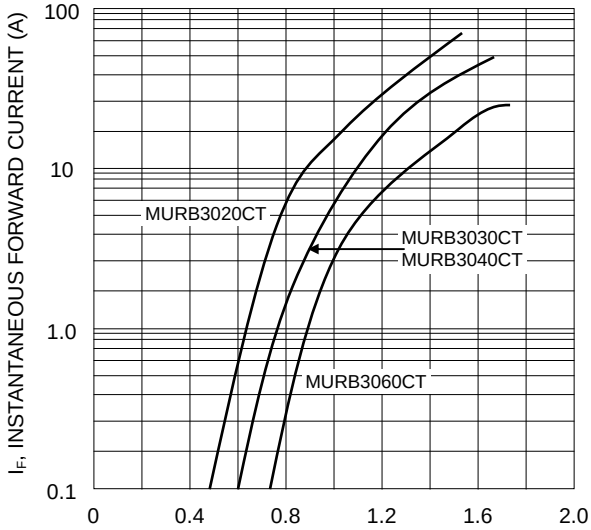


Fig. 2 Typical Forward Characteristics

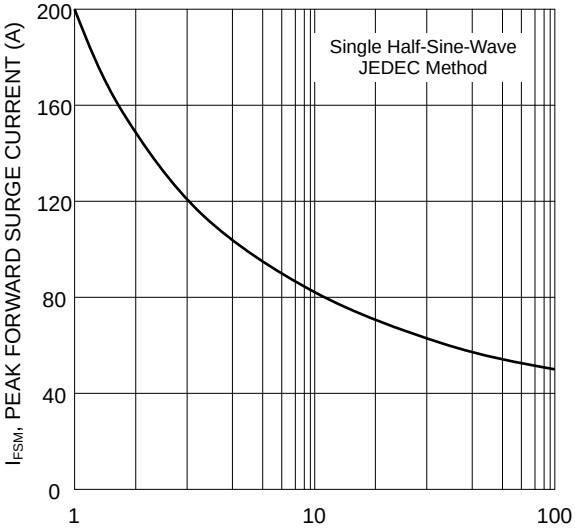


Fig. 3 Forward Surge Current Derating Curve

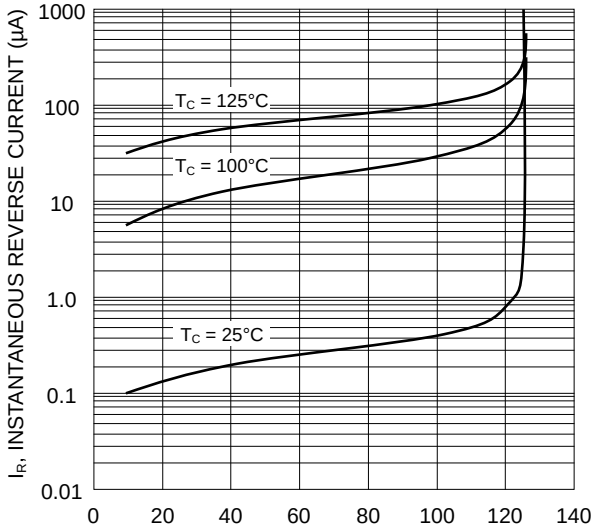


Fig. 4 Typical Reverse Characteristics

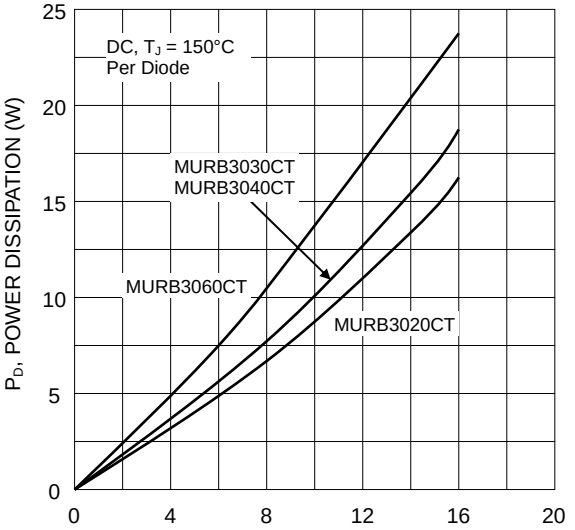


Fig. 5 Forward Power Dissipation

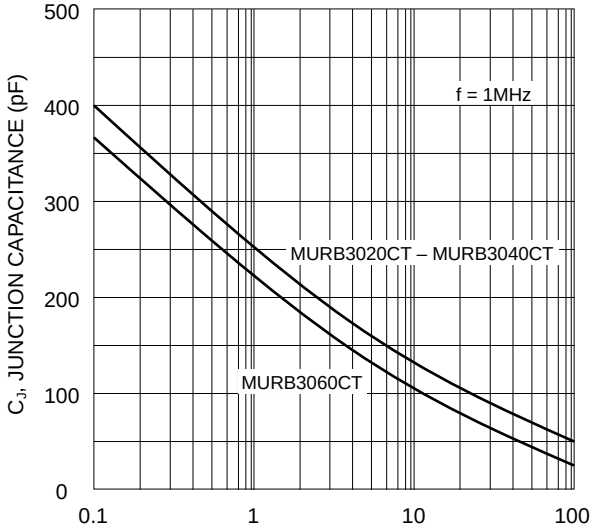
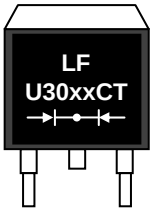


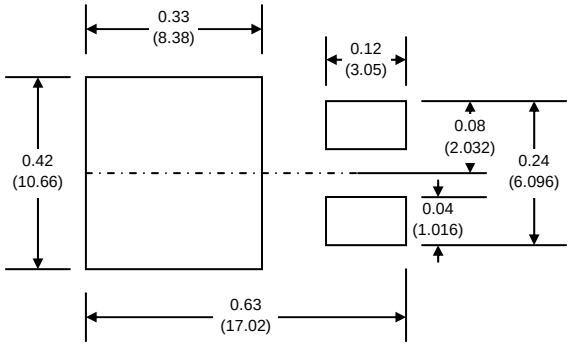
Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



U30xxCT = Device Number
xx = 20 (MURB3020CT)
30 (MURB3030CT)
40 (MURB3040CT)
60 (MURB3060CT)
Polarity = As Marked on Body

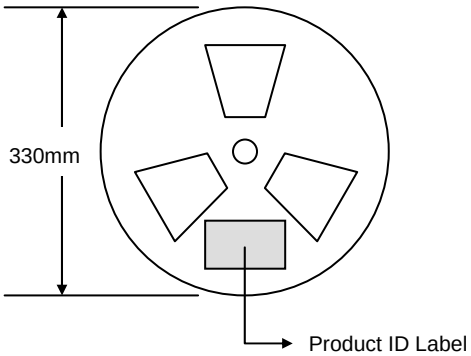
RECOMMENDED FOOTPRINT

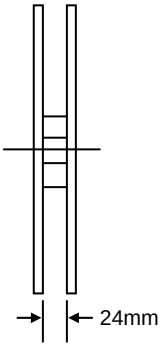


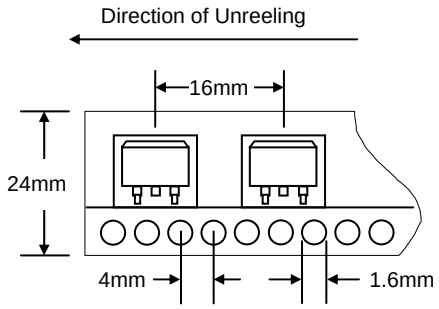
inches(mm)

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