SEMICONDUCTOR

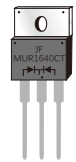
MUR1620CT THRU MUR1660CT

POLYIMIDE PASSIVATED SUPER FAST RECTIFIER

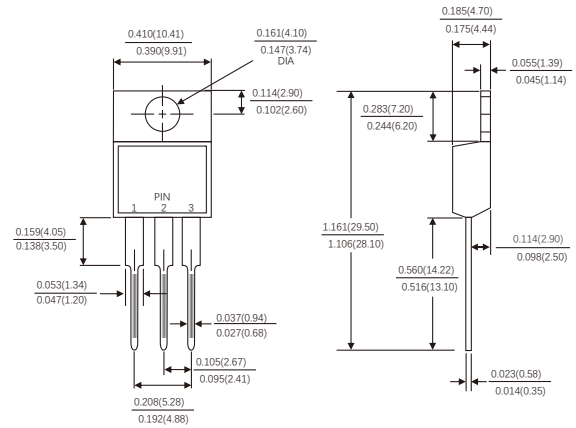
Reverse Voltage - 200 -600 Volts
Forward Current - 16.0Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



TO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC TO-220AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25 ℃ ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters		Symbols	MUR 1620CT	MUR 1640CT	MUR 1660CT	Units
Maximum repetitive peak reverse voltage		VRRM	200	400	600	Volts
Maximum RMS voltage		VRMS	140	280	420	Volts
Maximum DC blocking voltage		VDC	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)	Per leg	$I_{(AV)}$	8.0			Amps
	Total device		16.0			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method,Total device)		I_{FSM}	150			Amps
Maximum instantaneous forward voltage at 8.0 A per leg(Note 1)		V_F	0.975	1.3	1.5	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T_J=25°C	I_R	5			μA
	T_J=125°C		100			
Maximum Reverse Recovery Time (Note 2)		Trr	35			ns
Typical thermal resistance (Note 3)		$R_{\theta JC}$	2.0			°C/W
Operating junction temperature range		T_J	-55 to+175			°C
Storage temperature range		T_{STG}	-55 to+175			°C

Notes: 1. Pulse test: 300μs pulse width,1% duty cycle
2. Reverse recovery test conditions IF=0.5A,IR=1.0A, Irr=0.25A
3. Thermal resistance from junction to case

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RATINGS AND CHARACTERISTIC CURVES MUR1620CT THRU MUR1660CT

FIG.1-FORWARD CURRENT DERATING CURVE

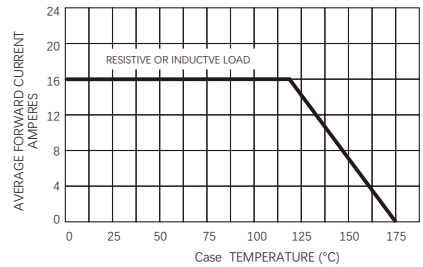


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

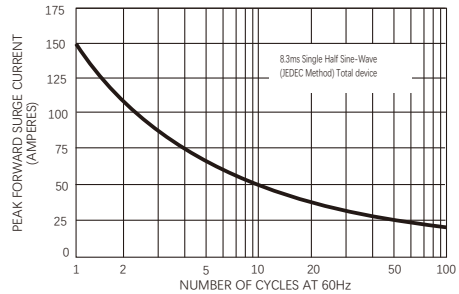


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

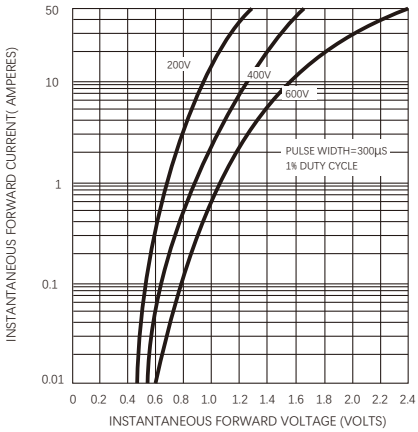


FIG.4-TYPICAL REVERSE CHARACTERISTICS

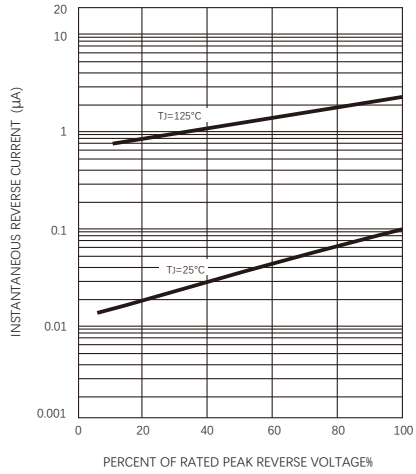


FIG.5-TYPICAL JUNCTION CAPACITANCE

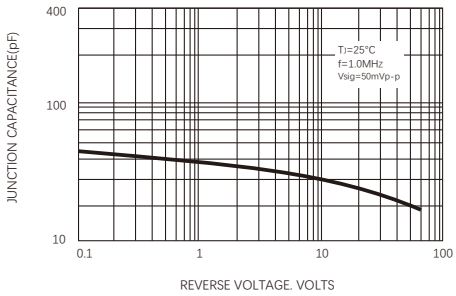
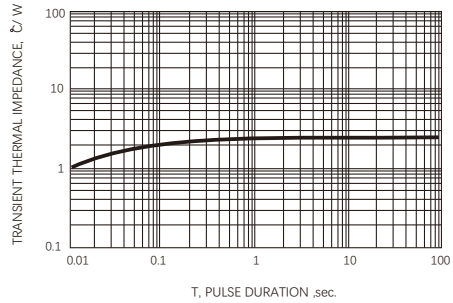


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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