

MUR1605CT~MUR1660CT

SUPERFAST RECOVERY RECTIFIER

VOLTAGE 50 to 600 Volt **CURRENT** 16 Ampere

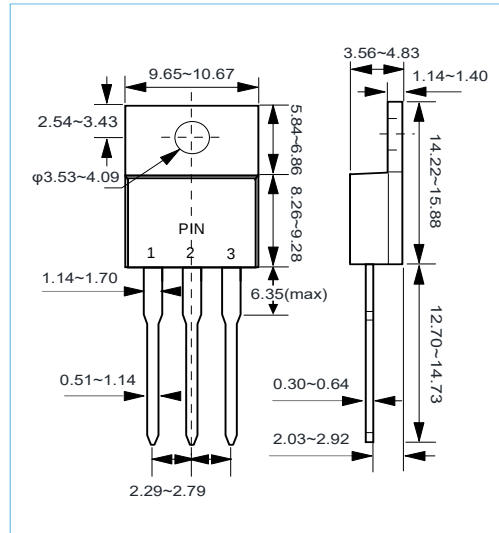
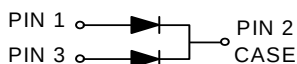
TO-220AB Unit:mm

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Low leakage.
- High surge capability.
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MUR1605CT	MUR1610CT	MUR1620CT	MUR1640CT	MUR1660CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Current at See Fig 1	I _{F(AV)}	16					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100					A
Maximum Forward Voltage at 8 A (Note 1)	V _F	0.975			1.30	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =125°C	I _R	5 500					μA
Maximum Reverse Recovery Time (Note 1)	t _{rr}	35			50		ns
Typical Junction Capacitance (Note 2)	C _J	62					pF
Typical thermal Resistance (Note 3)	R _{θJC}	2					°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150					°C

NOTES:

1. Pulse Test with $PW=300\mu sec$, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions : $I_F=0.5A, I_R=1A, I_{rr}=0.25A$
3. Mounted on P.C. Board with $14mm^2$ (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

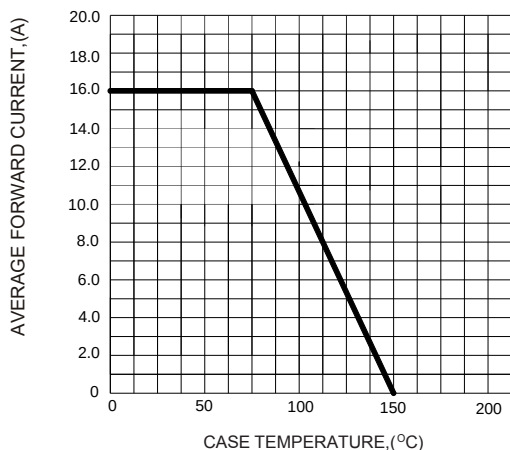


Fig. 1 Forward Current Derating Curve

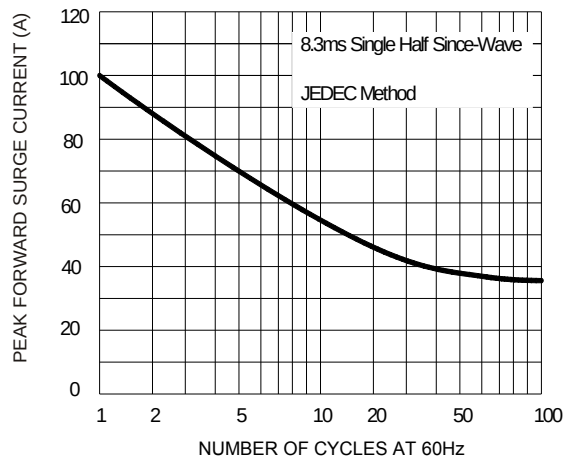


Fig. 2 Surge Current Derating Curve

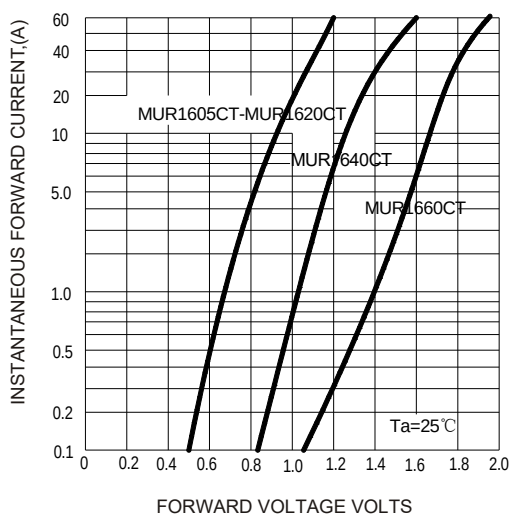


Fig. 3 Typical Forward Characteristics

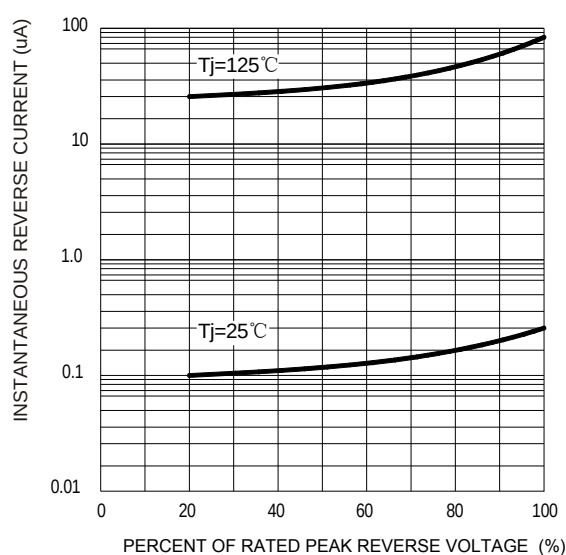
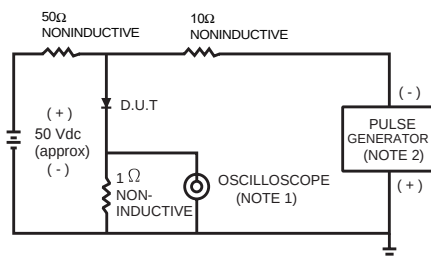


Fig. 4 Typical Reverse Characteristics



NOTES:
3. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf.
4. Rise time = 10 ns max; Source impedance = 50 ohms.

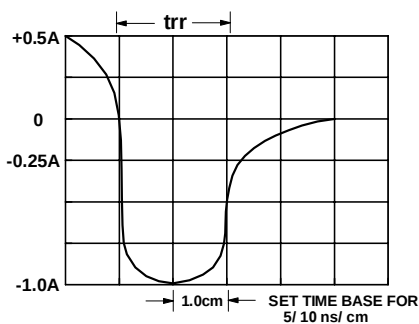


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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ORDER INFORMATION

- Packing information

Part Number	Case	DELIVERY MODE	QUANTITY
MUR1605CT~MUR1660CT	TO-220AB	Tube	1000/BOX