

Features:

- Fred chip construction
- Soft recovery characteristics
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- Plastic material has UL flammability classification 94V-0

Mechanical Data:

Case	: TO-220AB, molded plastic
Terminals	: Pure tin plated, lead solderable per MIL-STD-750, method 2026
Polarity	: As marked on the body
Weight	: 1.9 grams (approx)
Mounting Position	: Any
Reverse Voltage	: 400 to 600 Volts
Forward Current	: 16 Amperes

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	MUR1640CT	MUR1660CT	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	400	600	V
Max. RMS Voltage	V _{RMS}	400	420	
Max. DC Blocking Voltage	V _{DC}	280	600	
Max. Average Forward Rectified Current	I _{F(AV)}	16		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150		
Max. Forward Voltage at 8A per leg	V _F	1.3	1.5	V
Max. DC Reverse Current T _J = 25°C Rated DC Blocking Voltage T _J = 125°C	I _R	10 250		mA
Typical Thermal Resistance	R _{θJC}	2		°C/W
Max. Reverse Recovery Time (I _F = 0.5A, I _R = 1.0A, I _{RR} = 0.25A)	T _{RR}	50		
Operating Temperature Range	T _J	-55 to +150		°C
Storage Temperature Range	T _{STG}			

Notes:

1. Mounted on 14mm × 14mm pad areas, 1oz. FR4 P.C.B.
2. Free air, mounted on recommended copper pad area.
3. Pulse test: 300μs pulse width, 1% duty cycle.
4. Pulse test: Pulse width ≤ 40ms
5. The typical data above is for reference only

Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

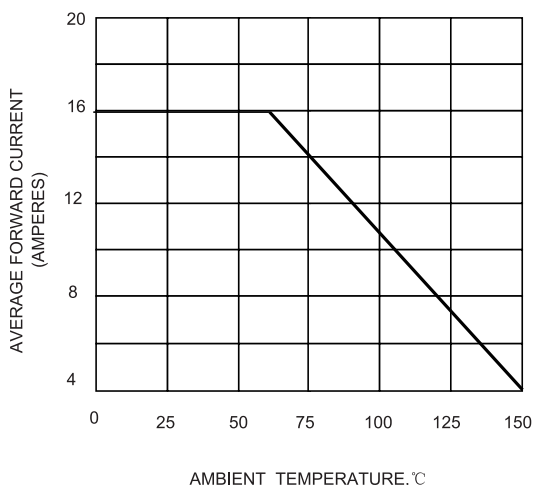


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

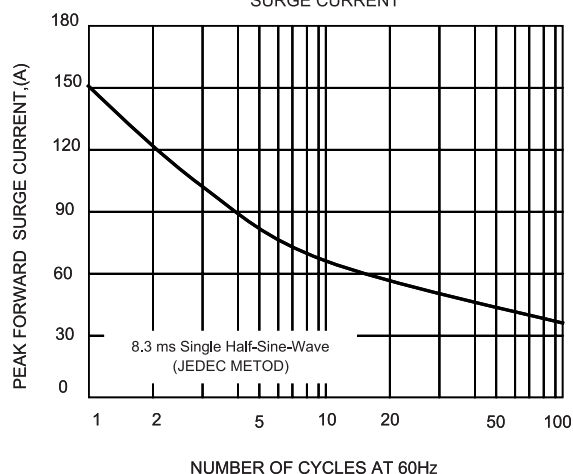


FIG.3-TYPICAL FORWARD CHARACTERISTICS

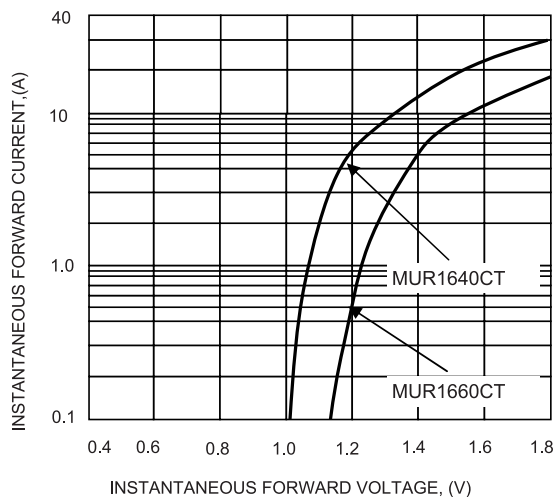
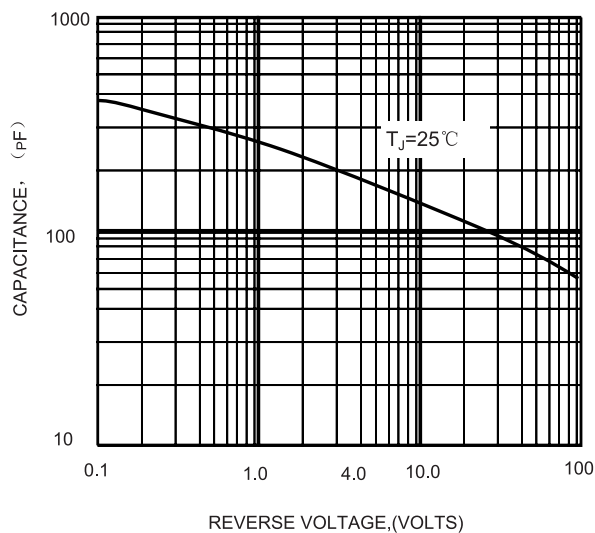
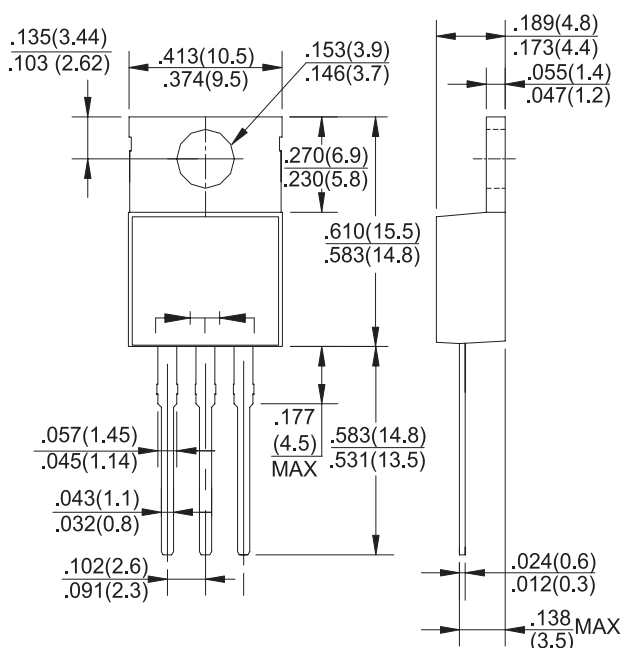


FIG.4-TYPICAL JUNCTION CAPACITANCE



Dimensions:

TO-220AB



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Ultra Fast Rectifiers	MUR1640CT
	MUR1660CT

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.