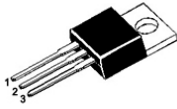
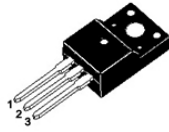


MUR1040CT/FCT/DC

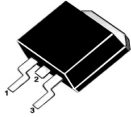
ULTRAFAST RECOVERY RECTIFIERS



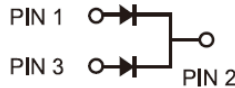
TO-220AB/CT



TO-220F/FCT



TO-263/DC



FEATURES

- High speed switching capability
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- High reliability
- For use in low voltage, high frequency inverters



APPLICATIONS

Fast recovery diode, mainly used for rectification, used in high-power equipment. The express and ultrafast recovery diodes are suitable for high frequency and ultra high frequency circuits, respectively

Primary Characteristic

I_o	2*5A
V_{RRM}	400V
I_{FSM}	70A
V_F	1.05V
T_{jmax}	150°C
Assembly code	AY

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Working Peak Reverse Voltage	V_{RWM}	400	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	I_o	Per Leg	5
		Total	10
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave	I_{FSM}	70	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
TO-220AB, TO-263			
TO-220F			
		4	

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
Forward Voltage Drop (Note2)	V_F	Typ.	Max.	V
		at $I_F=2A$	1.01	
	0.87	-		
at $I_F=3A$	1.08	-		
	0.95	-		
at $I_F=5A$	1.17	1.39		
	1.05	-		
Maximum Reverse Current at $V_R=400V$	I_R	TA=25°C	0.1	
		TA=125°C	10	-
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	T_{rr}	-	35	ns

Note2: Pulse test: 300 μs pulse width, 1 % duty cycle

MUR1040CT/FCT/DC

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

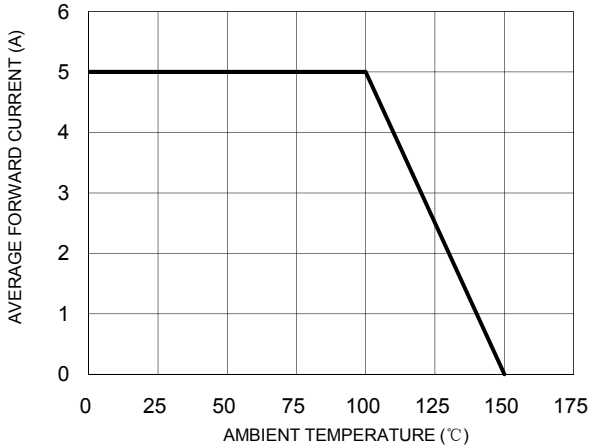


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

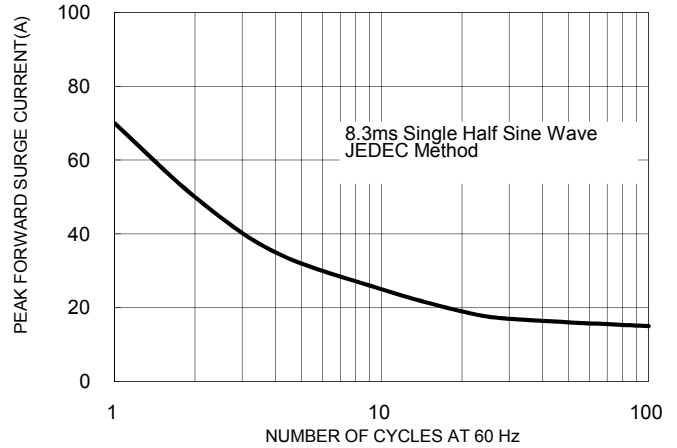


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

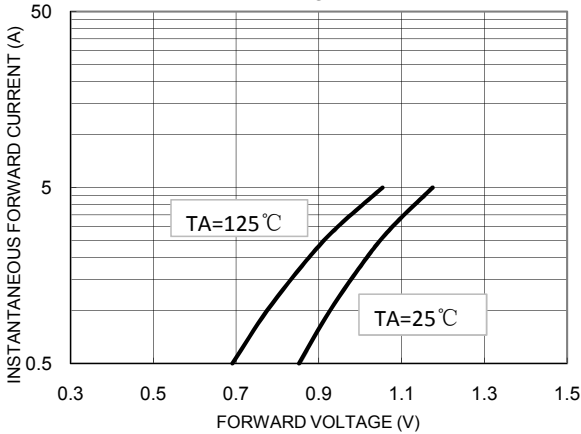
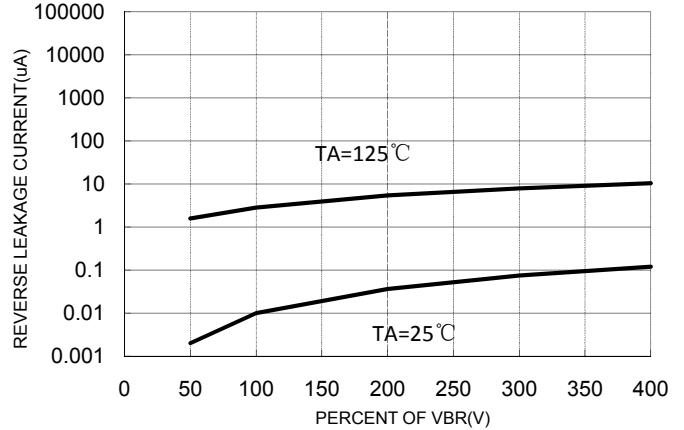
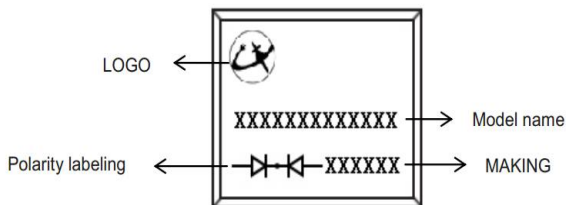


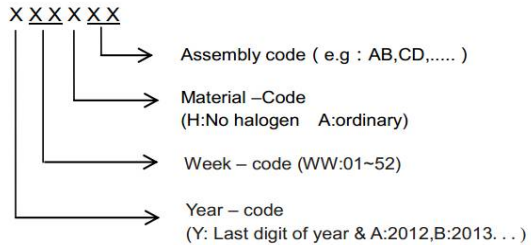
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



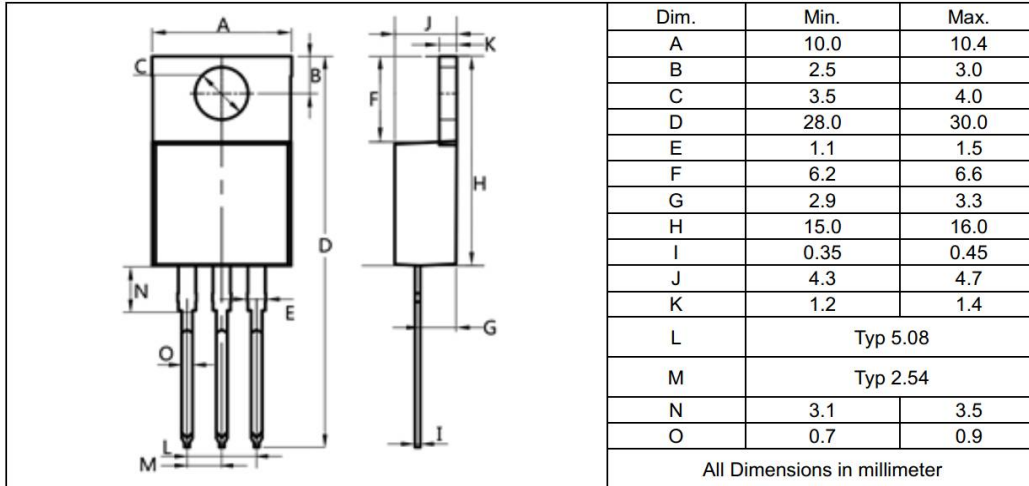
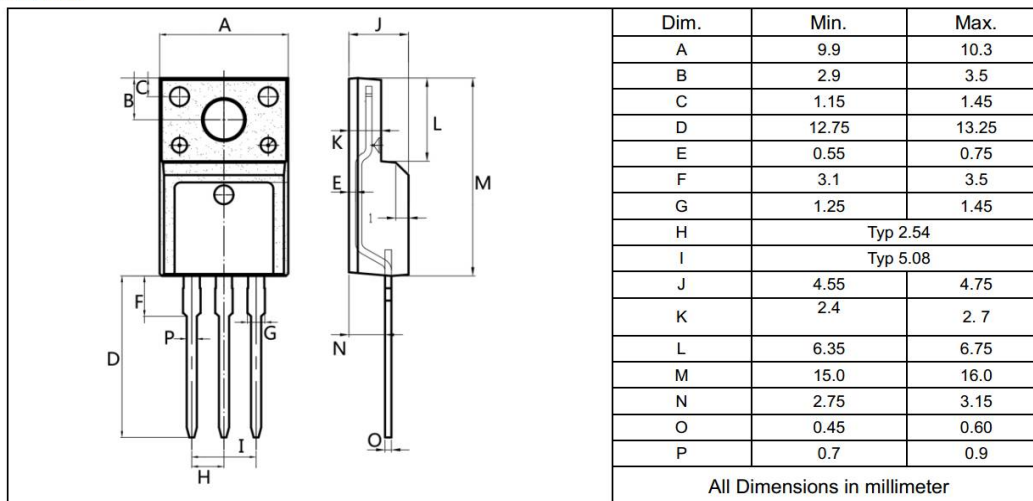
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR1040CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1040FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1040DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1040DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton

Note: For Halogen Free molding compound, add "H" suffix to part number above.

MUR1040CT/FCT/DC

Package Outline Dimensions millimeters

TO-220AB

TO-220F

TO-263
