

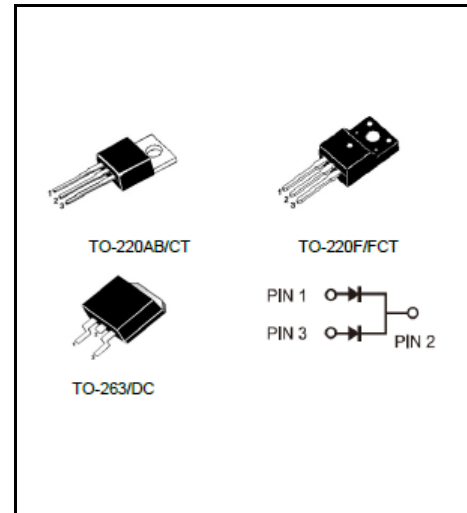
ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 600 V

Forward Current - 16 A

FEATURES

- ◆High speed switching capability
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses, High efficiency
- ◆For use in low voltage, high frequency inverters
- ◆Lead free in comply with EU RoHS 2011/65/EU directives



MECHANICAL DATA

- ◆Case: TO-220AB/CT TO-220F/FCT TO-263/DC
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106

Primary Characteristic

I_o	2*8A
V_{RRM}	600V
I_{FSM}	110A
V_F	1.1V
T_J Max	150°C

Maximum Ratings (Per Leg) at $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	600	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	Per Leg	8	A
	Total	16	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	110	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB/CT TO-220F/FCT TO-263/DC	$R_{\theta JA}$ $R_{\theta JC}$	2/4	°C/W

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

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics		Symbols	Value		Units
Forward Voltage Drop(Note2)		V _F	Typ	Max	V
at IF=3A	TA=25°C		1.10	-	
	TA=125°C		0.91	-	
at IF=5A	TA=25°C		1.20	-	
	TA=125°C		1.00	-	
at IF=8A	TA=25°C		1.27	1.59	
	TA=125°C		1.10	-	
Maximum Reverse Current at V _R =600V	TA=25°C	I _R	0.05	1	uA
	TA=25°C		15	-	uA
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A		T _{RR}	-	35	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

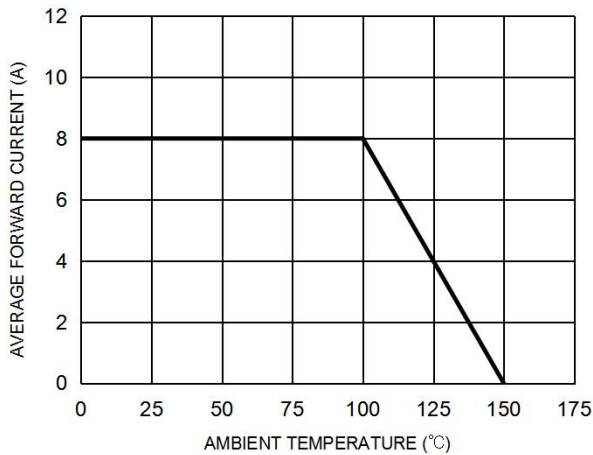


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

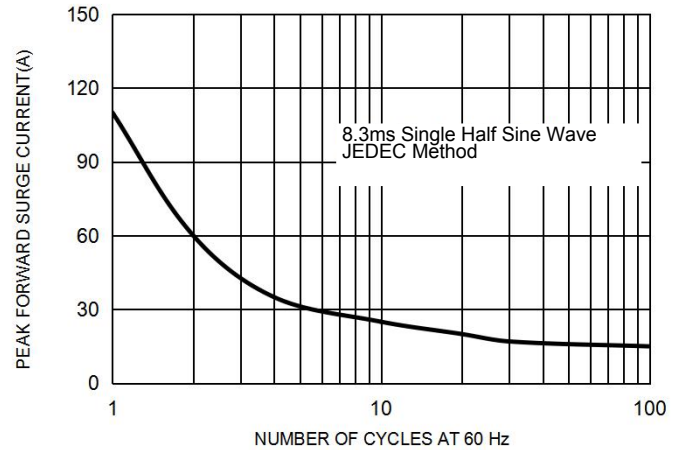


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

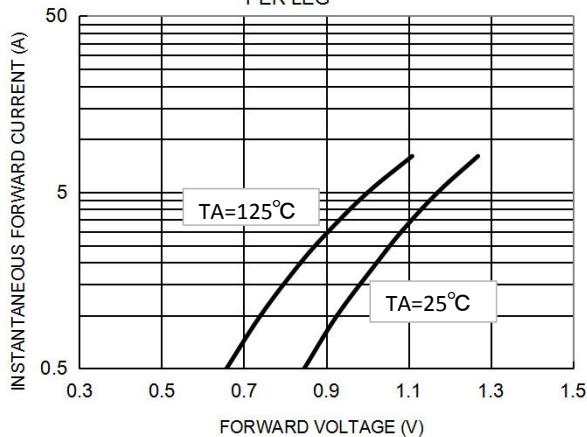
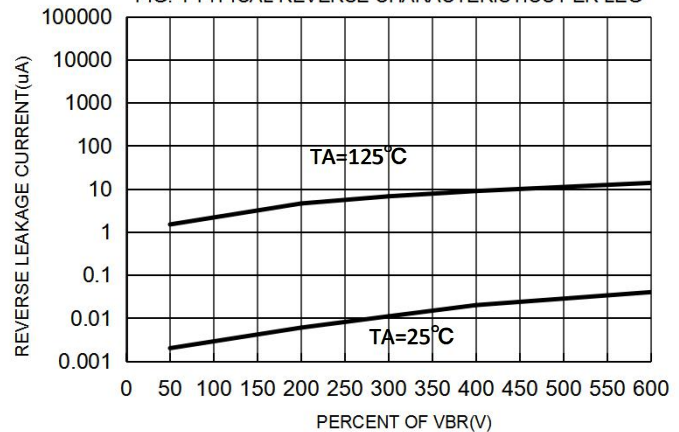
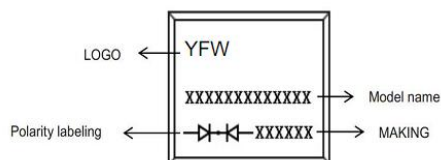


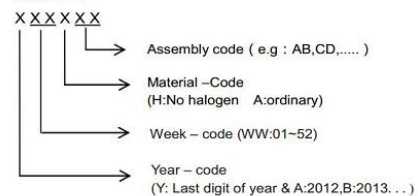
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR1660CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1660FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1660DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1660DC-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.

Package Outline Dimensions millimeters

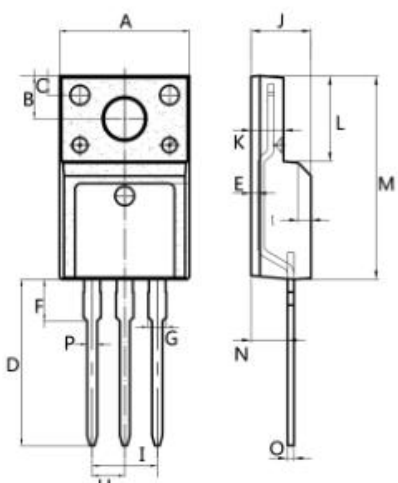
TO-220AB

The image shows a technical drawing of a TO-220AB package. The left view is a top-down perspective showing a rectangular body with a circular mounting hole. Dimensions labeled include: A (total width), B (width of the top flange), C (height of the top flange), D (total height), E (height of the lead), F (height of the body), G (height of the lead), H (height of the body), I (height of the lead), J (width of the lead), K (width of the lead), L (width of the lead), M (width of the lead), N (width of the lead), O (width of the lead). The right view is a side profile showing the package's thickness and lead profile. Dimensions labeled include: J (width of the lead), K (width of the lead), F (height of the body), H (height of the body), G (height of the lead), I (height of the lead).

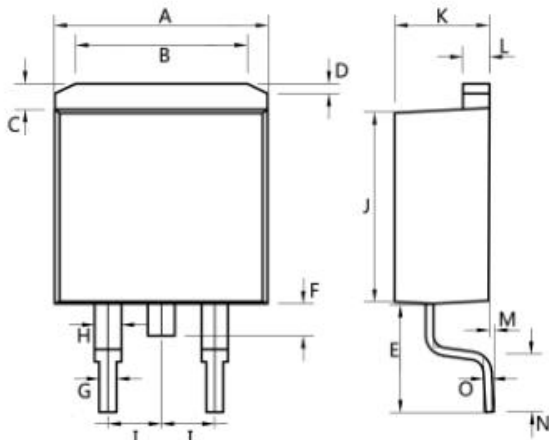
Dim.	Min.	Max.
A	10.15	10.35
B	2.65	2.95
C	3.70	3.90
D	28.5	29.5
E	1.30	1.45
F	6.35	6.55
G	2.9	3.3
H	15.0	16.0
I	0.38	0.42
J	4.45	4.55
K	1.25	1.35
L	Typ 5.08	
M	Typ 2.54	
N	3.1	3.3
O	0.76	0.84

All Dimensions in millimeter

TO-220F

	Dim.	Min.	Max.
	A	9.95	10.25
	B	2.95	3.25
	C	1.25	1.45
	D	12.95	13.25
	E	0.50	0.65
	F	3.1	3.3
	G	1.30	1.45
	H	Typ 2.54	
	I	Typ 5.08	
	J	4.60	4.75
	K	2.50	2.65
	L	6.35	6.55
	M	15.4	16.0
All Dimensions in millimeter			

TO-263

	Dim.	Min.	Max.
	A	10.1	10.2
	B	7.4	7.6
	C	1.3	1.5
	D	0.55	0.75
	E	5.0	6.0
	F	1.4	1.6
	G	0.78	0.86
	H	1.2	1.3
	I	Typ 2.54	
	J	8.4	8.6
	K	4.45	4.55
	L	1.25	1.35
	M	0.02	0.1
All Dimensions in millimeter			