

ULTRAFST RECOVERY RECTIFIERS

Reverse Voltage - 600 V

Forward Current - 8 A

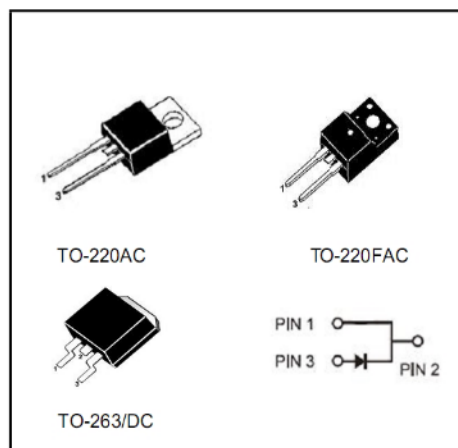


FEATURES

- ♦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-220AC TO-220FAC TO-263/DC
- ♦Solder bath temperature 275°C maximum, 10s per JESD22-106



Primary Characteristic

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

Maximum Ratings (Per Leg) at Ta=25°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	I_o	8	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave	I_{FSM}	110	A
Operating Temperature Range	T_J	-40 ~ +150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AC TO-263/DC TO-220FAC	$R_{\theta JA} / R_{\theta JC}$	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		1.17	-	
	TA=125°C		1.01	-	
at IF=8A	TA=25°C		1.27	1.59	
	TA=125°C		1.11	-	
Maximum Reverse Current at $V_R=600V$	TA=25°C	I_R	0.5	1	uA
	TA=125°C		15	-	uA
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A		T_{RR}	-	35	nS

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

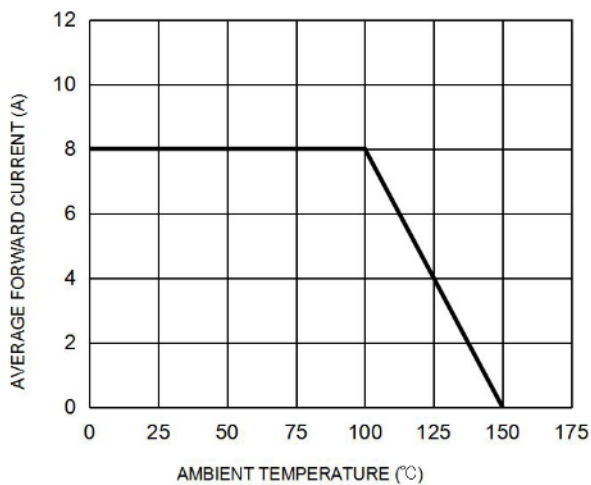


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

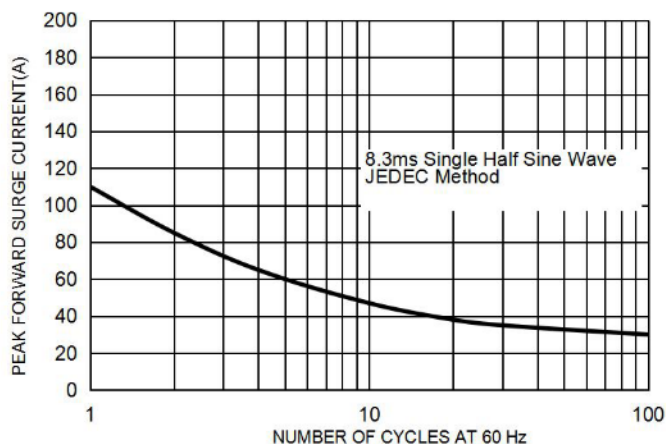


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

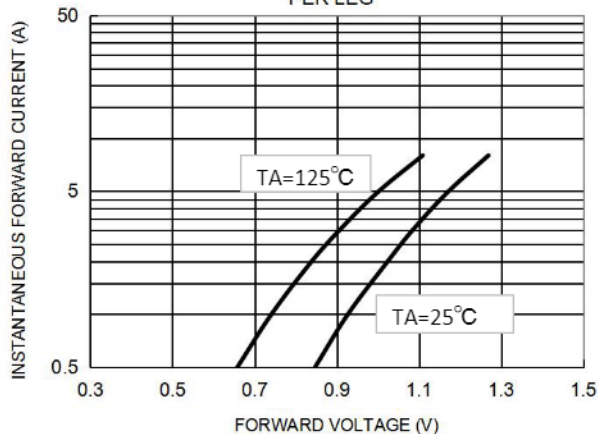
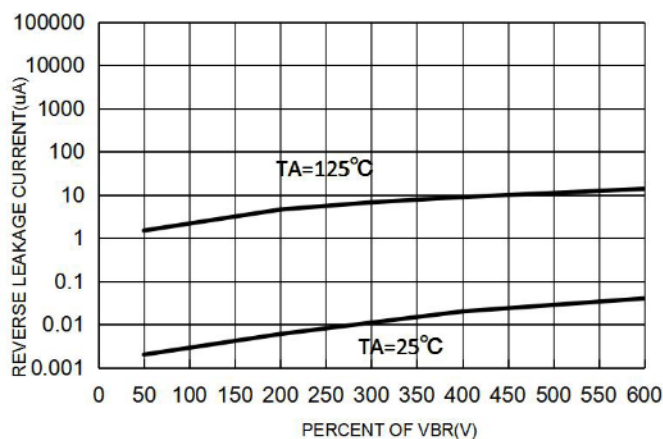
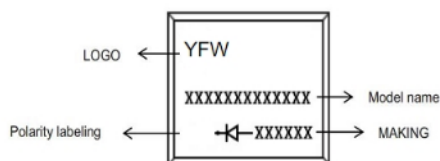


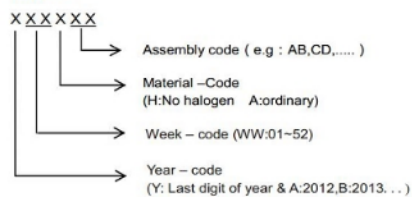
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



MAKING:



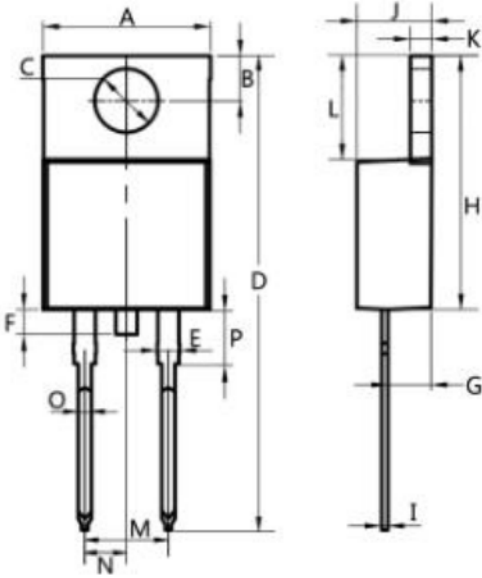
Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR860	TO-220AC	0.067oz(1.9g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR860FAC	TO-220FAC	0.06oz(1.7g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR860DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR860DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton

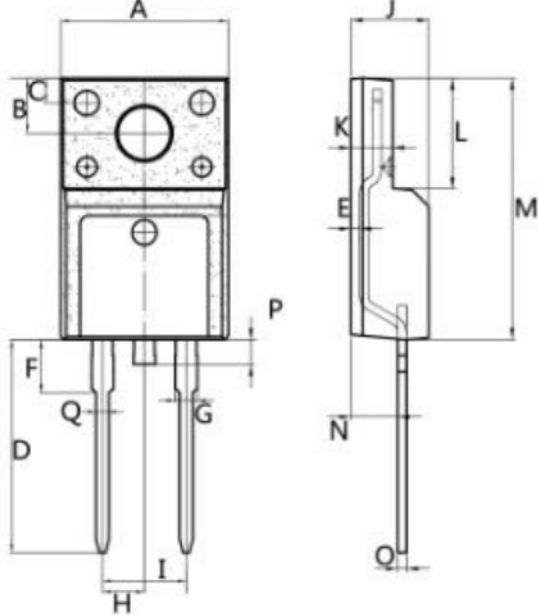
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

TO-220AC

	Dim.	Min.	Max.
	A	10.15	10.35
	B	2.65	2.95
	C	3.70	3.90
	D	28.5	29.5
	E	1.3	1.45
	F	1.4	1.6
	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	6.35	6.55
	M	Typ 5.08	
	N	Typ 2.54	
	O	0.76	0.84
	P	3.1	3.3
All Dimensions in millimeter			

TO-220FAC

	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
	N	2.75	3.05
	O	0.48	0.52
	P	1.4	1.60
	Q	0.76	0.84
All Dimensions in millimeter			

TO-263

