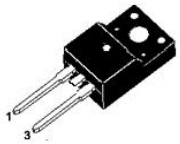
ULTRAFAST RECOVERY RECTIFIERS



TO-220FAC/F

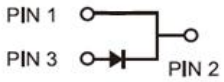
FEATURES

- 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

RoHS COMPLIANT

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	8A
V_{RRM}	600V
I_{FSM}	110A
V_F	1.11V
$T_J$max	150℃
Assembly code	CI

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℃ maximum,10s per JESD 22-B106

Maximum Ratings at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Working Peak Reverse Voltage	V_{RWM}	600	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current	I_O	8	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	110	A
Operating Temperature Range	T_J	-40 to +150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1) TO-220AC,TO-263 TO-220FAC	$R_{\theta JC}$	 2 4	°C/W

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

Electrical Characteristics unless otherwise specified

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at I_F=3A	TA=25°C		1.10	-	
	TA=125°C		0.91	-	
at I_F=5A	TA=25°C		1.17	-	
	TA=125°C		1.01	-	
at I_F=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	0.05	1	μA
	TA=125°C		15	-	μA
Maximum Reverse Recovery Time at I_F=0.5A, I_R=1A,		Trr	-	35	ns

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

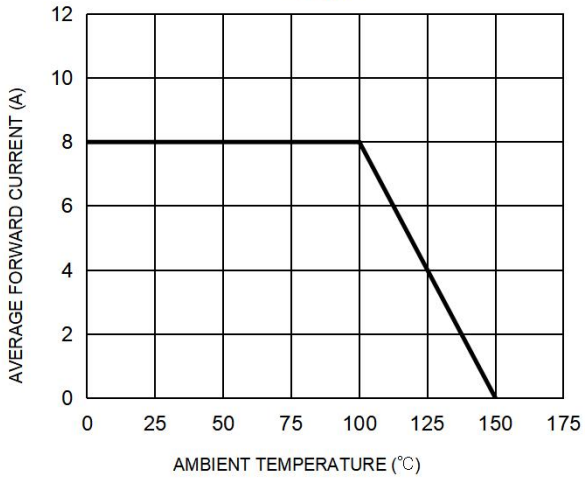


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

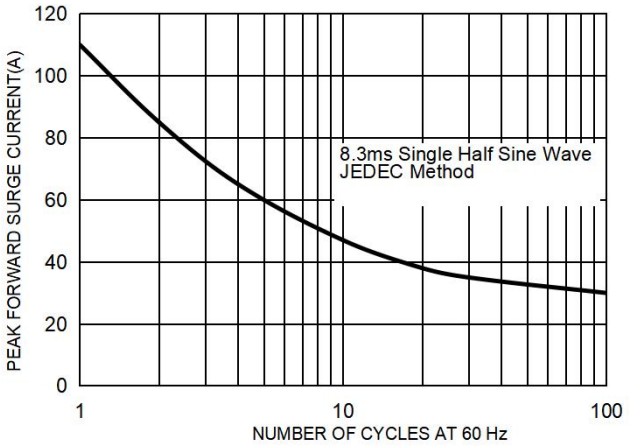


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

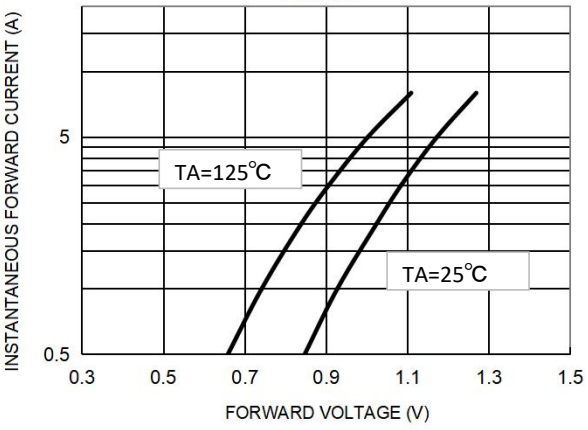
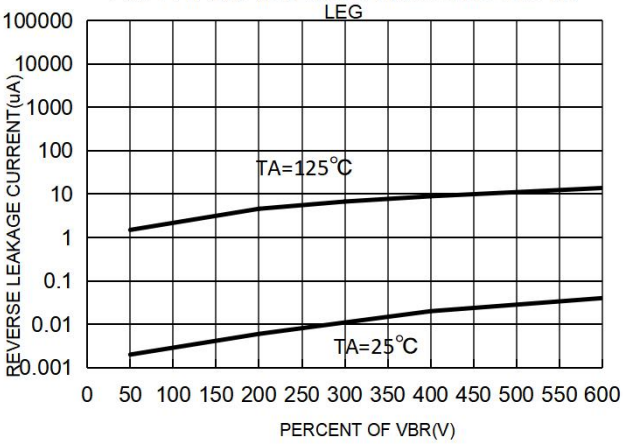
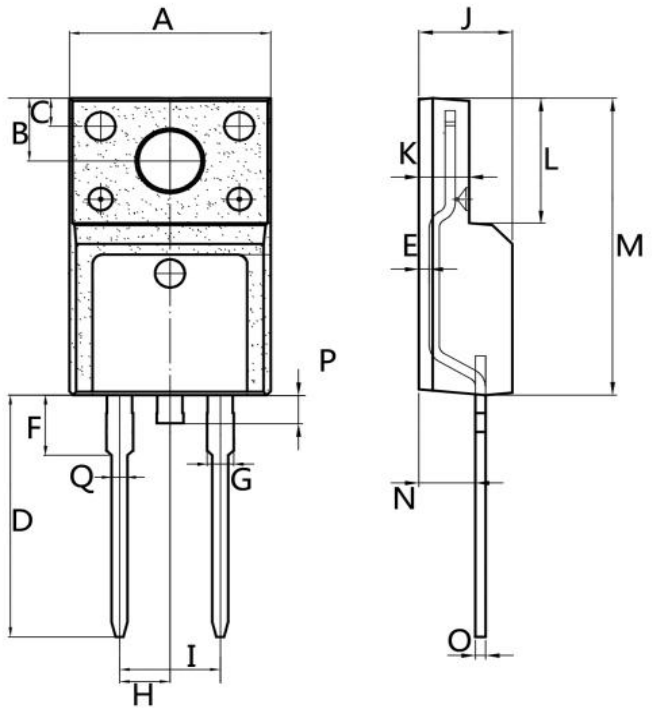


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

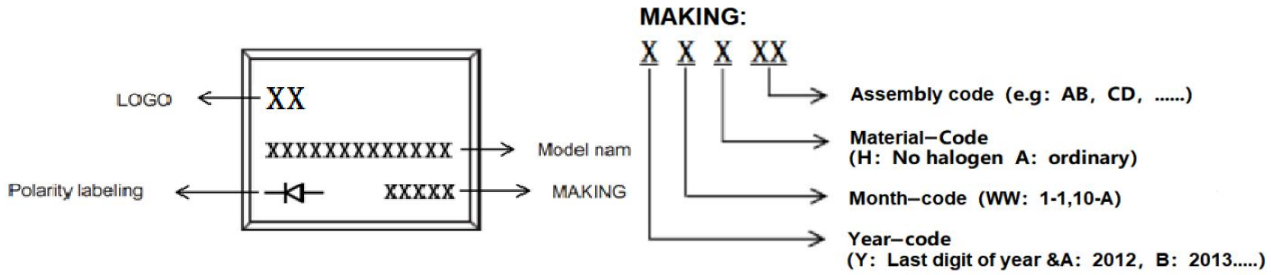


TO-220FAC



Dim.	Min.	Max.
A	9.95	10.25
B	2.95	3.25
C	1.25	1.45
D	12.95	13.25
E	0.40	0.60
F	2.8	3.5
G	1.30	1.45
H	Typ 2.54	
I	Typ 5.08	
J	4.60	4.75
K	2.45	2.65
L	6.5	6.8
M	15.4	16.0
N	2.75	3.05
O	0.45	0.55
P	0.6	0.8
Q	0.76	0.84
All Dimensions in millimeter		

Marking on the body

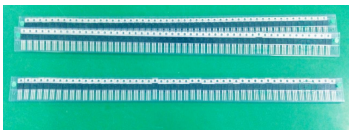
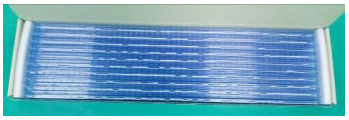


Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MURF860	TO-220FAC	0.067oz(1.7g)	50 pcs / tube	1000pcs/box 5000pcs/carton

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

packing instruction

PKG	最小包装	内盒	外箱
TO-220FAC			
	50pcs/管	1000pcs/盒	5000pcs/箱