

# MUR1560/F/D

## **ULTRAFAST RECOVERY RECTIFIERS**

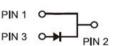




TO-220AC/

TO-220FAC/F





TO-263/D

Primary Characteristic		
Ι <sub>ο</sub>	15A	
V <sub>RRM</sub>	600V	
I <sub>FSM</sub>	150A	
V <sub>F</sub>	1.0V	
Trr	25ns	
T <sub>J</sub> max	175℃	

### 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

## **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  $^\circ\!\!\mathbb C$  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 <sub>RRM</sub>	600	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	600	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	V
Maximum Average Forward Rectified Current	l <sub>o</sub>	15	А
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150	A
Operating Temperature Range	TJ	175	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175	°C
Typical Thermal Resistance (Note1)			
TO-220AB,TO-263	R <sub>0 JC</sub>	2	°C/W
TO-220F	÷	4	

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

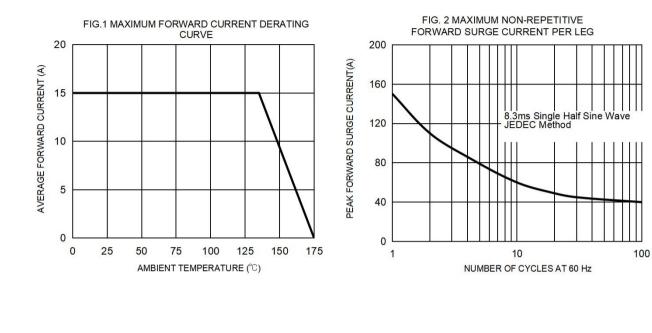
Electrical Characteristics (Per Leg) unless otherwise specified					
Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at 1 - 2 A	TA=25°C	[	0.92	-	
at I <sub>F</sub> =3A	TA=125°C		0.73	-	
at L = 5 A	TA=25°C	V <sub>F</sub>	0.99	-	V
at I <sub>F</sub> =5A	TA=125°C		0.80	-	
at I <sub>F</sub> =15A	TA=25°C		1.25	1.60	
	TA=125°C		1.00	-	
Maximum Reverse Current at V <sub>R</sub> =600V	TA=25°C	1	0.1	20	μA
	TA=125°C	I <sub>R</sub>	11	-	μA
Maximum Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1A,		Trr	25	35	ns

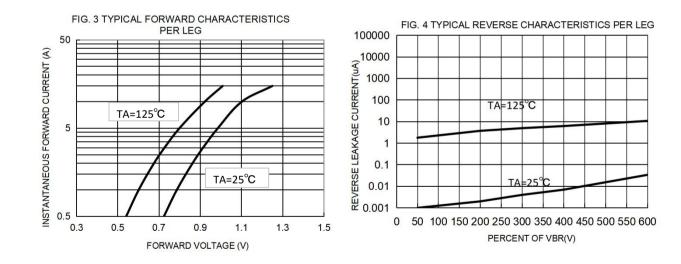
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle



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# RATINGS AND CHARACTERISTIC CURVES



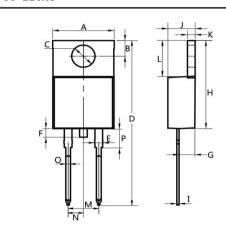






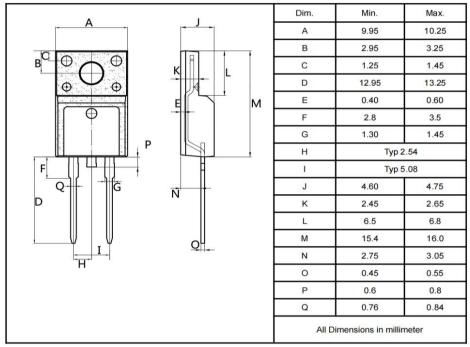
## Package Outline Dimensions millimeters

TO-220AC

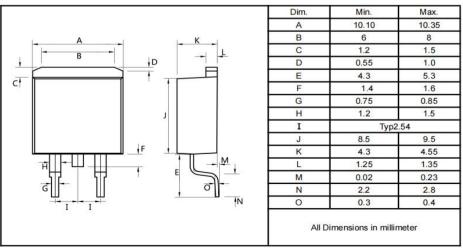


Dim.	Min.	Max.	
A	10.15	10.35	
В	2.65	2.95	
С	3.70	3.90	
D	28.5	29.5	
E	1.3	1.45	
F	0.8	1.1	
G	2.9	3.3	
Н	15.0	16.0	
L	0.38	0.42	
J	4.45	4.55	
к	1.25	1.35	
L	6.35	6.55	
M	Typ 5.08		
N	Typ 2.54		
0	0.76	0.84	
Р	3.1	3.3	
All Dimensions in millimeter			

TO-220FAC



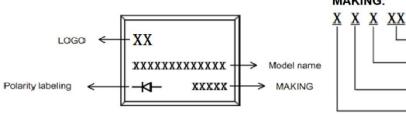
TO-263





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#### Marking on the body



MAKING:

Assembly code (e.g: AB, CD, .....) Material-Code (H: No halogen A: ordinary)

Month-code (WW: 1-1,10-A)

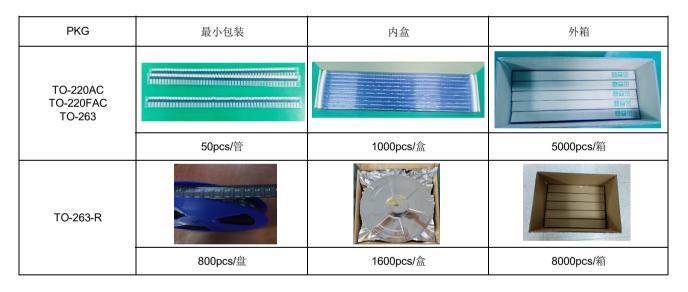
Year-code (Y: Last digit of year &A: 2012, B: 2013.....)

## Ordering information

Ordening mormation				
Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR1560	TO-220AC	0.067oz(1.9g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1560F	TO-220FAC	0.06oz(1.7g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1560D	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1560D-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton

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

### packing instruction



### Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power;

exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.

3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.