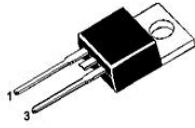


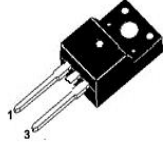


# MUR1560/F/D

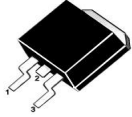
## ULTRAFAST RECOVERY RECTIFIERS



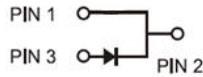
TO-220AC/



TO-220FAC/F



TO-263AC/D



### 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-equipment, The express and ultrafast recovery diodes are suitable high frequency and ultra high frequency circuits, respectively

### Primary Characteristic

$I_O$	15A
$V_{RRM}$	600V
$I_{FSM}$	250A
$V_F$	1.0V
$T_{jmax}$	150°C

### 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 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	$I_O$	15	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave	$I_{FSM}$	250	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-263AC	$R_{\theta JC}$	2	°C/W
TO-220FAC		4	

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		0.92	-	
	TA=125°C		0.73	-	
at $I_F=5A$	TA=25°C		0.99	-	
	TA=125°C		0.80	-	
at $I_F=15A$	TA=25°C		1.20	1.59	
	TA=125°C	1.00	-		
Maximum Reverse Current at $V_R=600V$	TA=25°C	$I_R$	0.03	1	µA
	TA=125°C		11	-	
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A, I_{RR}=0.25A$		$T_{rr}$	-	50	ns

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



# MUR1560/F/D

## RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

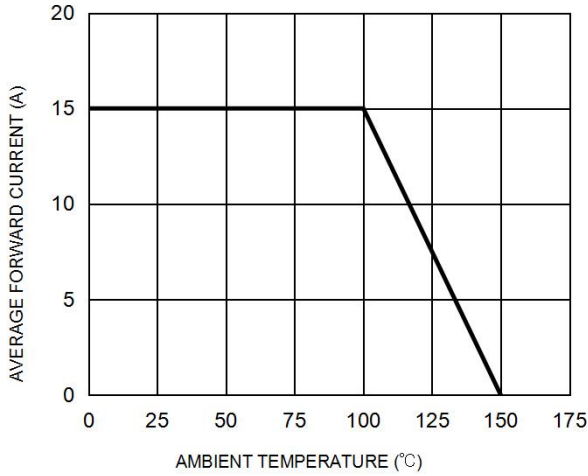


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

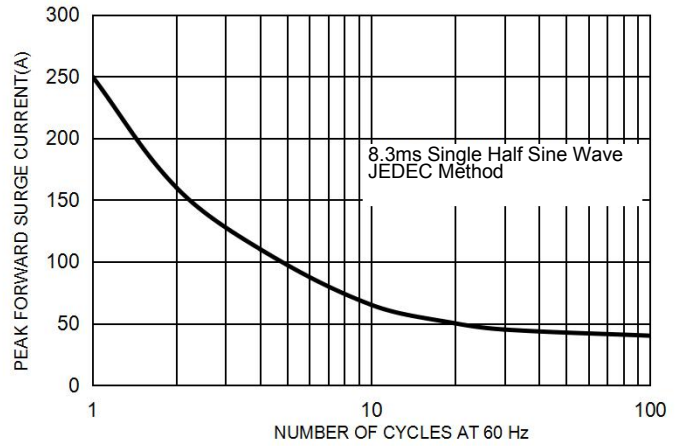


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

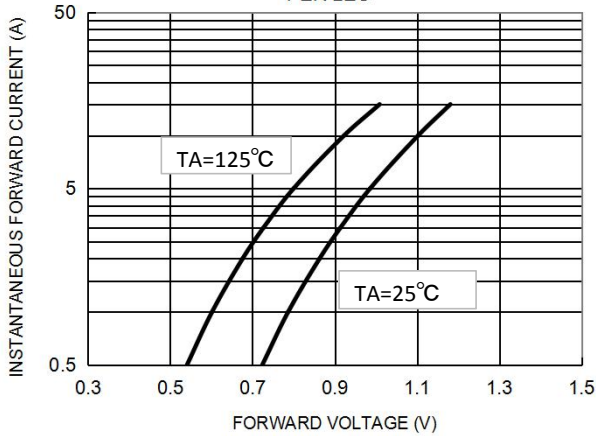
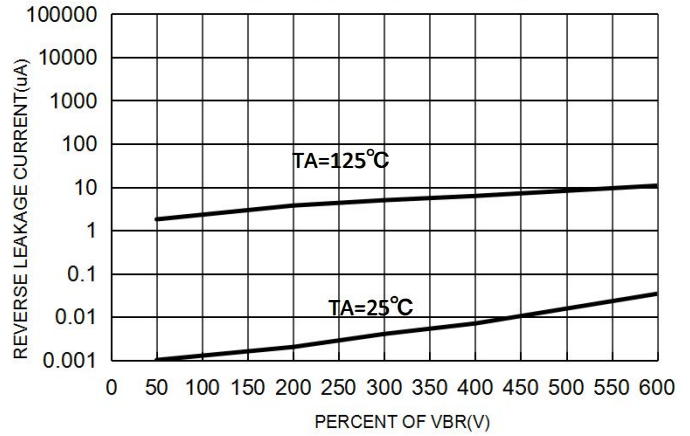
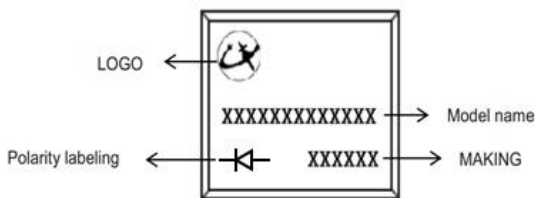


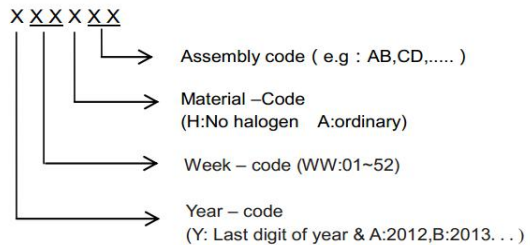
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



## Marking on the body



### MAKING:



## Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
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-263AC	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR1560D-R	TO-263AC	0.04oz(1.16g)	800 pcs / reel	800pcs/box 4000pcs/carton

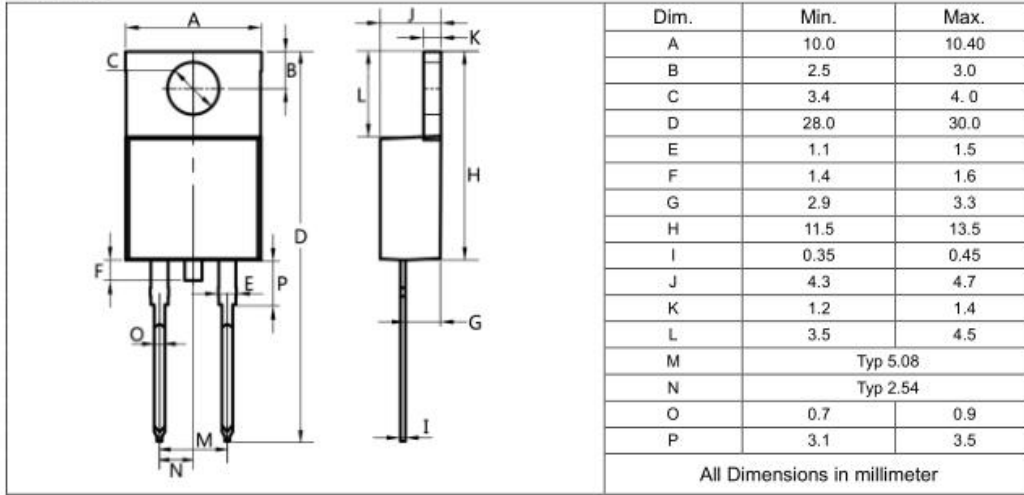
Note: For Halogen Free molding compound, add "H" suffix to part number above.



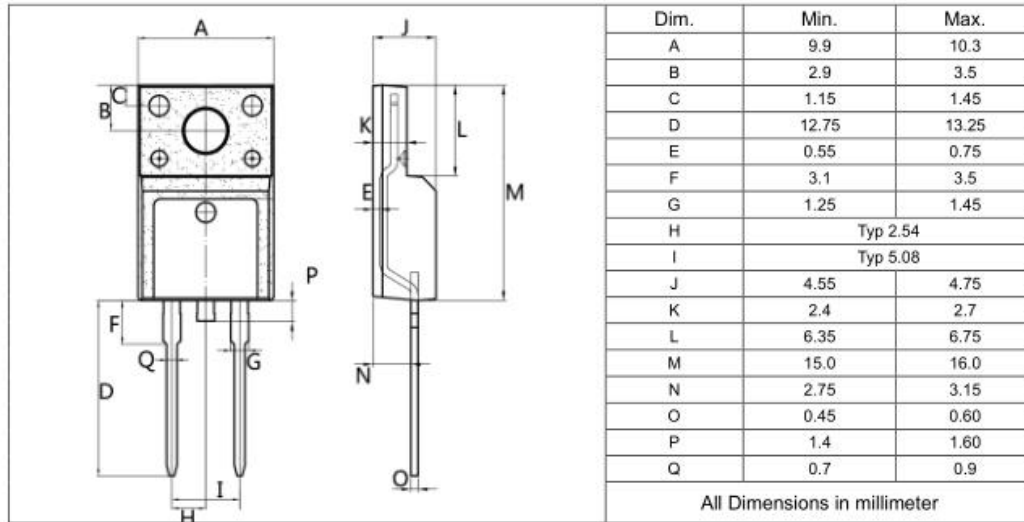
# MUR1560/F/D

## Package Outline Dimensions millimeters

TO-220AC



TO-220FAC



TO-263AC

