

## ULTRAFST RECOVERY RECTIFIERS

**Reverse Voltage - 200 V**

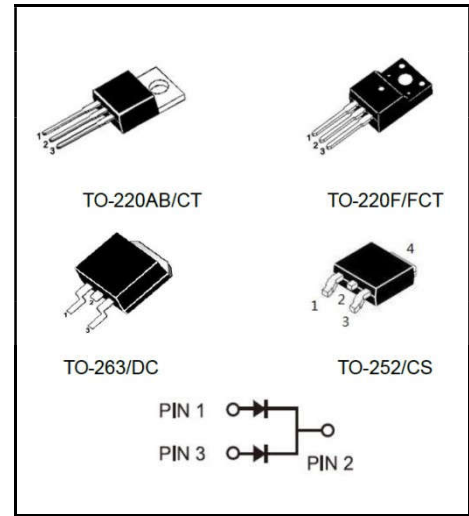
**Forward Current - 12 A**

### 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, TO-252/CS
- ◆ Solder bath temperature 275°C maximum, 10s per JESD22-106



### Primary Characteristic

|                          |              |
|--------------------------|--------------|
| <b>I<sub>o</sub></b>     | <b>2*6A</b>  |
| <b>V<sub>RRM</sub></b>   | <b>200V</b>  |
| <b>I<sub>FSM</sub></b>   | <b>100A</b>  |
| <b>V<sub>F</sub></b>     | <b>0.8V</b>  |
| <b>T<sub>J</sub> Max</b> | <b>150°C</b> |

### Maximum Ratings (Per Leg) At Ta=25°C Unless Otherwise Specified

| Parameter   | Symbols                                 | Value      | Units       |
|---|---|------------|-------------|
| Maximum Repetitive Peak Reverse Voltage                 | <b>V<sub>RRM</sub></b>                  | 200        | <b>V</b>    |
| Maximum RMS voltage                                     | <b>V<sub>RMS</sub></b>                  | 140        | <b>V</b>    |
| Maximum DC Blocking Voltage                             | <b>V<sub>DC</sub></b>                   | 200        | <b>V</b>    |
| Maximum Average Forward Rectified Current               | Per Leg                                 | 6          | <b>A</b>    |
|   | Total                                   | 12         |             |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave | <b>I<sub>FSM</sub></b>                  | 100        | <b>A</b>    |
| Operating Temperature Range                             | <b>T<sub>J</sub></b>                    | 150        | <b>°C</b>   |
| Storage Temperature Range                               | <b>T<sub>STG</sub></b>                  | -40 ~ +150 | <b>°C</b>   |
| Typical Thermal Resistance (Note1)                      | <b>R<sub>θJA</sub>/ R<sub>θJC</sub></b> | 2/4        | <b>°C/W</b> |

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

### Electrical Characteristics (Per Leg) Unless Otherwise Specified

| Characteristics  | Symbols               | Value    |          | Units |           |      |
|--|-----------------------|----------|----------|-------|-----------|------|
|  |                       | Typ      | Max      |       |           |      |
| Forward Voltage Drop(Note2)                                | <b>V<sub>F</sub></b>  | at IF=2A | TA=25°C  | 0.81  | <b>V</b>  |      |
|  |                       |          | TA=125°C | 0.67  |           |      |
|  |                       | at IF=3A | TA=25°C  | 0.84  |           |      |
|  |                       |          | TA=125°C | 0.71  |           |      |
|  |                       | at IF=6A | TA=25°C  | 0.92  |           | 0.97 |
|  |                       |          | TA=125°C | 0.80  |           |      |
| Maximum Reverse Current at V <sub>R</sub> =200V            | <b>I<sub>R</sub></b>  | TA=25°C  | 0.02     | 1     | <b>uA</b> |      |
|  |                       | TA=125°C | 5        | -     | <b>uA</b> |      |
| Maximum Reverse Recovery Time at IF=0.5A, IR=1A, IRR=0.25A | <b>T<sub>RR</sub></b> | -        |          | 35    | <b>nS</b> |      |

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

**Ratings and Characteristic Curves**

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

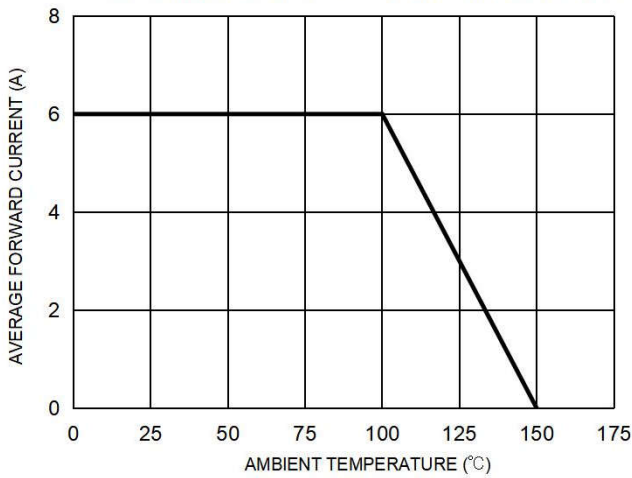


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

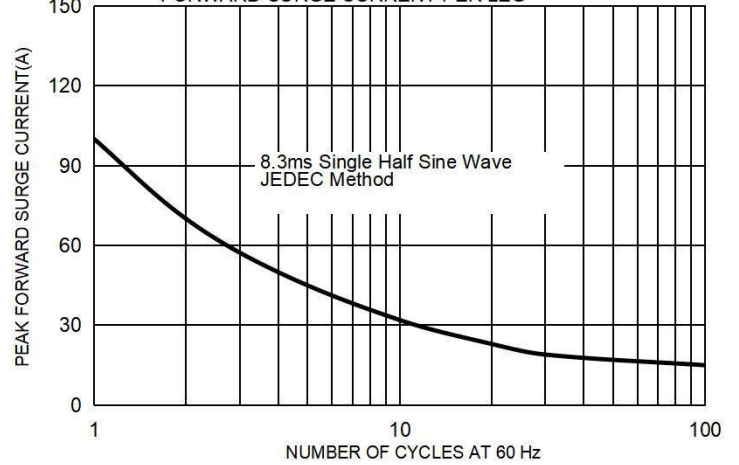


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

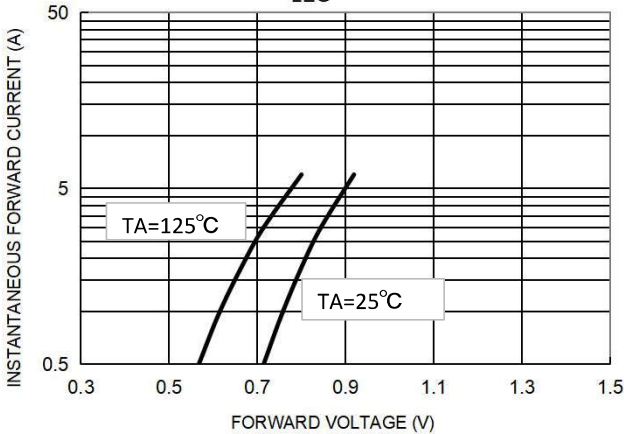
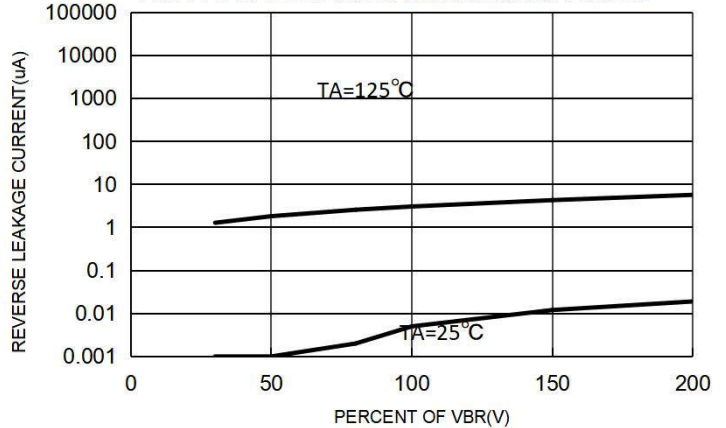
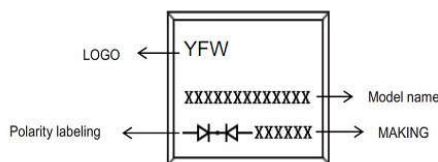


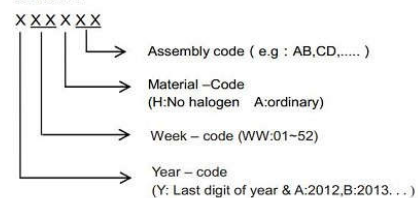
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



**MAKING:**



**Ordering information**

| Part Number | Package  | Unit Weight    | Base Quantity   | Delivery mode               |
|-------------|----------|----------------|-----------------|-----------------------------|
| MUR1220CT   | TO-220AB | 0.07oz(1.96g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| MUR1220FCT  | TO-220F  | 0.06oz(1.74g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| MUR1220DC-G | TO-263   | 0.04oz(1.16g)  | 50 pcs / tube   | 1000pcs/box 5000pcs/carton  |
| MUR1220DC   | TO-263   | 0.04oz(1.16g)  | 800 pcs / reel  | 1600pcs/box4000pcs/carton   |
| MUR1220CS   | TO-252   | 0.011oz(0.32g) | 2500 pcs / reel | 5000pcs/box125000pcs/carton |

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

Package Outline Dimensions Millimeters

TO-220AB

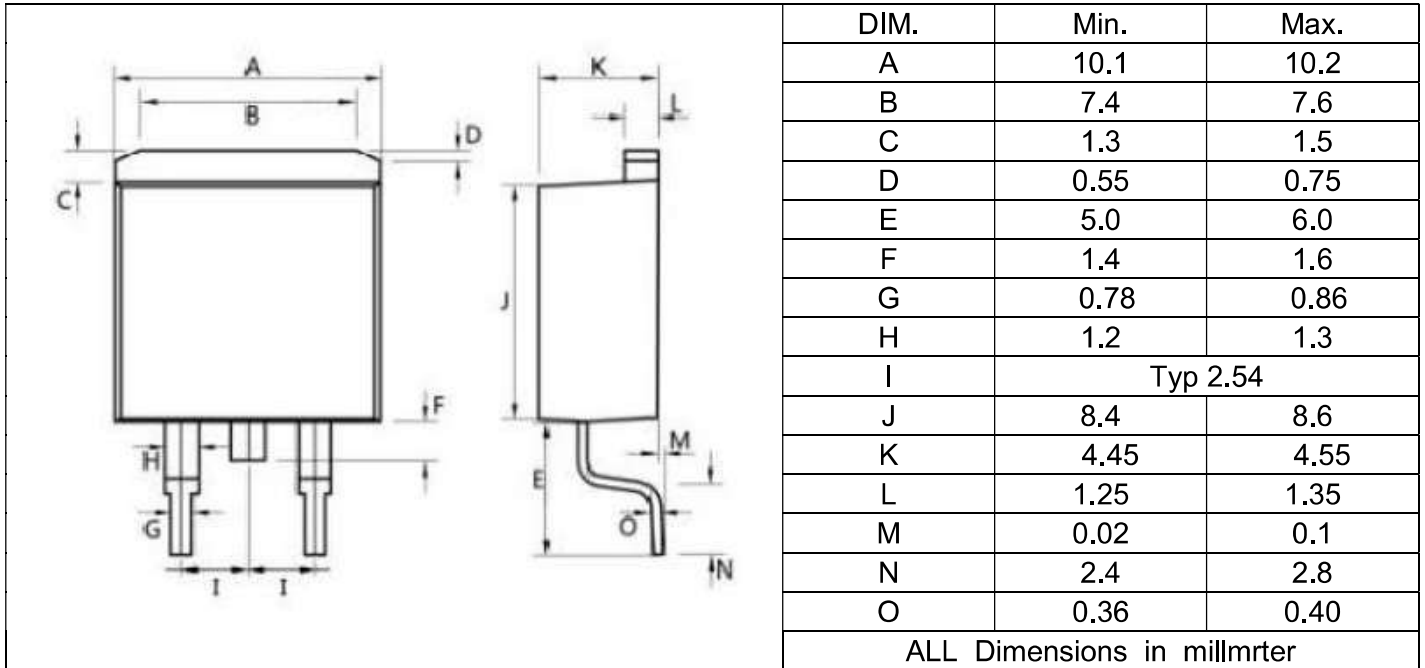
|                              |      |          |       |
|------------------------------|------|----------|-------|
|                              | Dim. | Min.     | Max.  |
|                              | A    | 10.15    | 10.35 |
|                              | B    | 2.65     | 2.95  |
|                              | 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

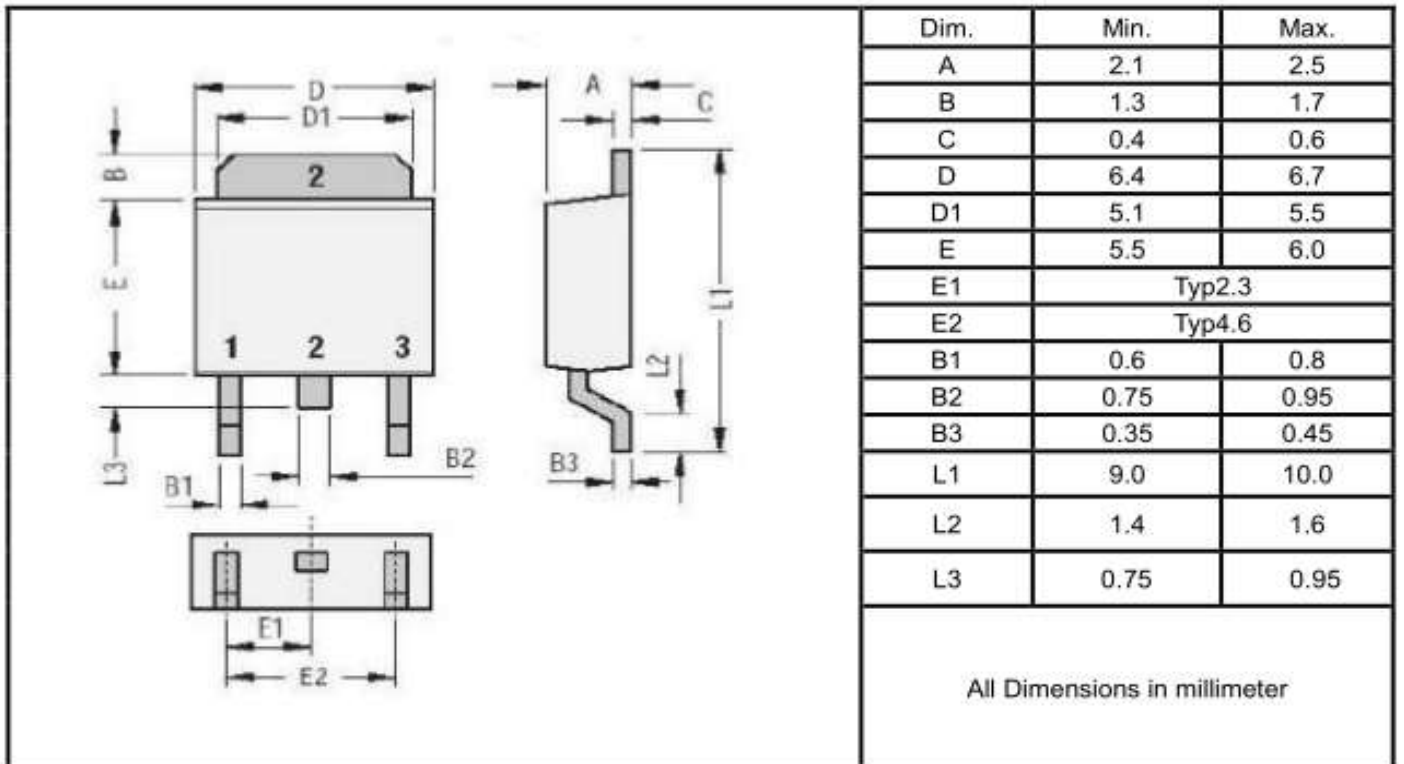
|                              |      |          |       |
|------------------------------|------|----------|-------|
|                              | Dim. | Min.     | Max.  |
|                              | A    | 9.95     | 10.25 |
|                              | B    | 2.95     | 3.25  |
|                              | 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  |
| N                            | 2.75 | 3.05     |       |
| O                            | 0.48 | 0.52     |       |
| P                            | 0.76 | 0.84     |       |
| All Dimensions in millimeter |      |          |       |

Package Outline Dimensions Millimeters

TO-263



TO-252



单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)