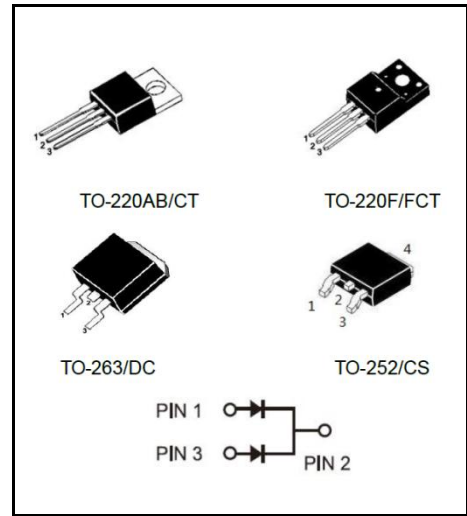


SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 V

Forward Current - 20 A



FEATURES

- ◆ Low forward voltage
- ◆ High current capability
- ◆ High forward surge capability
- ◆ Low power losses, High efficiency
- ◆ Guarding for over voltage protection
- ◆ 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

| | |
|--------------------------|--------------|
| I_o | 2*10A |
| V_{RRM} | 150V |
| I_{FSM} | 290A |
| V_F | 0.72V |
| 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} | 150 | V |
| Maximum RMS voltage | V_{RMS} | 150 | V |
| Maximum DC Blocking Voltage | V_{DC} | 150 | V |
| Maximum Average Forward Rectified Current | Per Leg | 10 | A |
| | Total | 20 | |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave | I_{FSM} | 290 | A |
| Operating Temperature Range | T_J | -55 ~ +150 | °C |
| Storage Temperature Range | T_{STG} | -55 ~ +150 | °C |
| Typical Thermal Resistance ^(Note1) TO-220AB, TO-263 TO252 TO-220F | R_{θJA} R_{θJC} | 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 | |
|---|----------------------|----------|------|-------|-----------|
| | | Typ | Max | | |
| Forward Voltage Drop(Note2) at I _F =3A at I _F =5A at I _F =10A | V_F | TA=25°C | 0.73 | - | V |
| | | TA=125°C | 0.60 | - | |
| | | TA=25°C | 0.77 | - | |
| | | TA=125°C | 0.64 | - | |
| | | TA=25°C | 0.84 | 0.90 | |
| | | TA=125°C | 0.72 | - | |
| Maximum Reverse Current at V _R =150V | I_r | TA=25°C | 1 | 10 | uA |
| | | TA=125°C | 1 | - | mA |

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

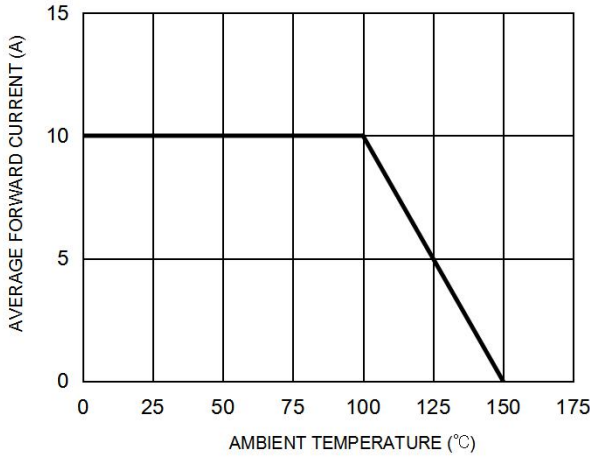


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

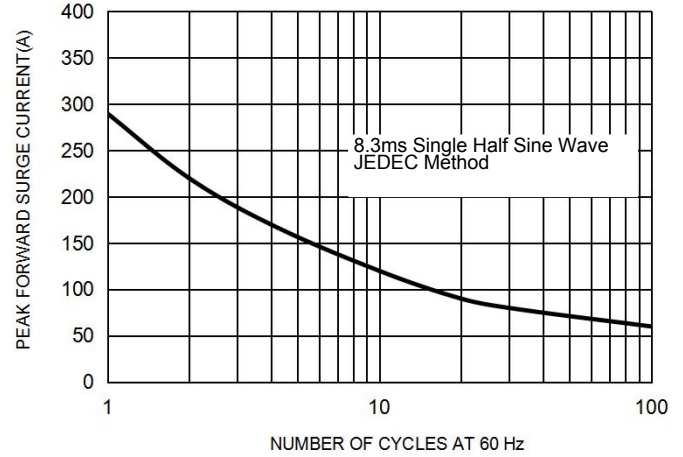


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

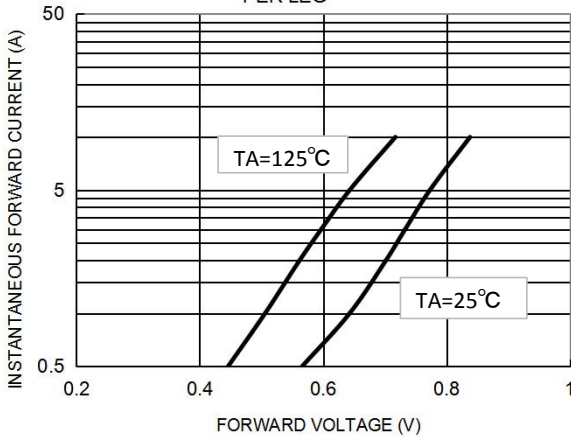
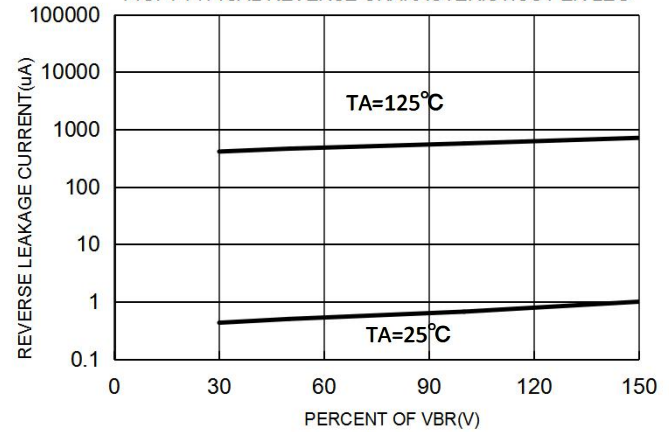
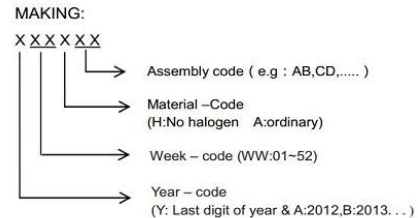
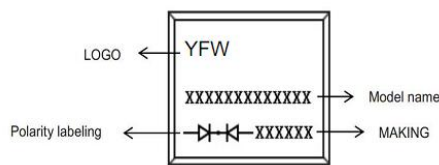


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking on the body



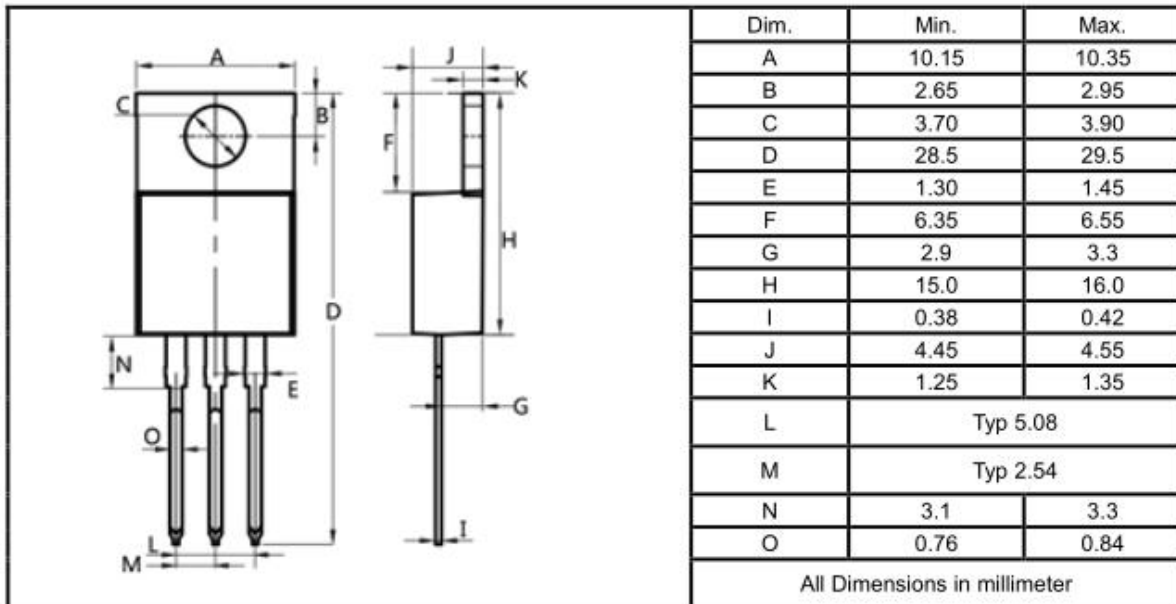
Ordering information

| Part Number | Package | Unit Weight | Base Quantity | Delivery mode |
|--------------|----------|----------------|-----------------|-----------------------------|
| MBR20150CT | TO-220AB | 0.07oz(1.96g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MBR20150FCT | TO-220F | 0.06oz(1.74g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MBR20150DC | TO-263 | 0.04oz(1.16g) | 50 pcs / tube | 1000pcs/box 5000pcs/carton |
| MBR20150DC-R | TO-263 | 0.04oz(1.16g) | 800 pcs / reel | 800pcs/box4000pcs/carton |
| MBR20150CS | TO-252 | 0.011oz(0.32g) | 2500 pcs / reel | 2500pcs/box 12500pcs/carton |

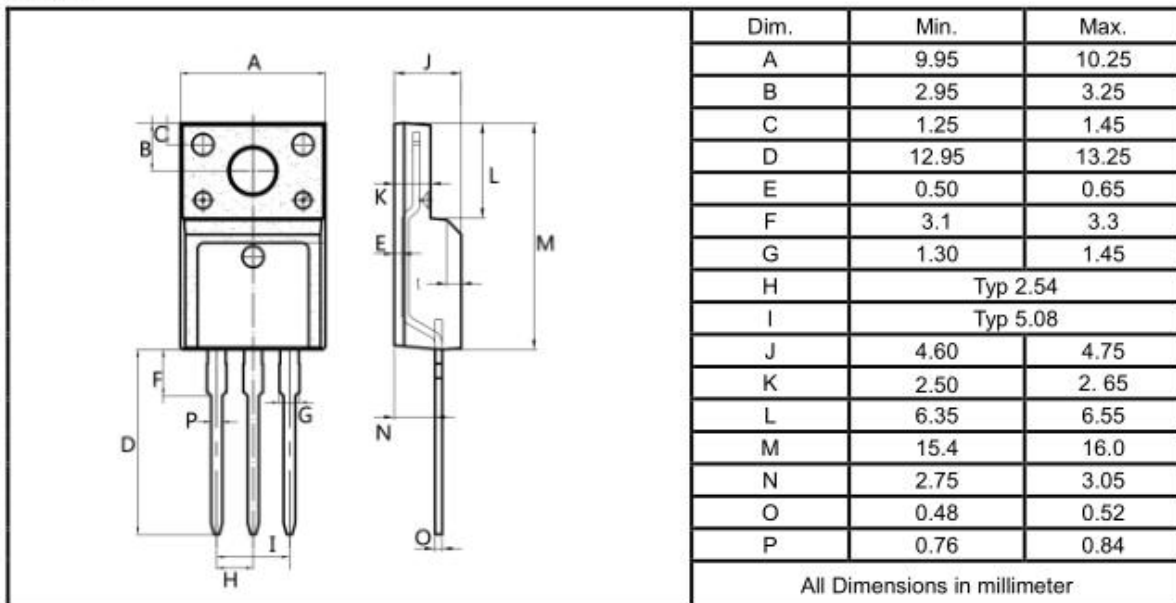
Note: For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

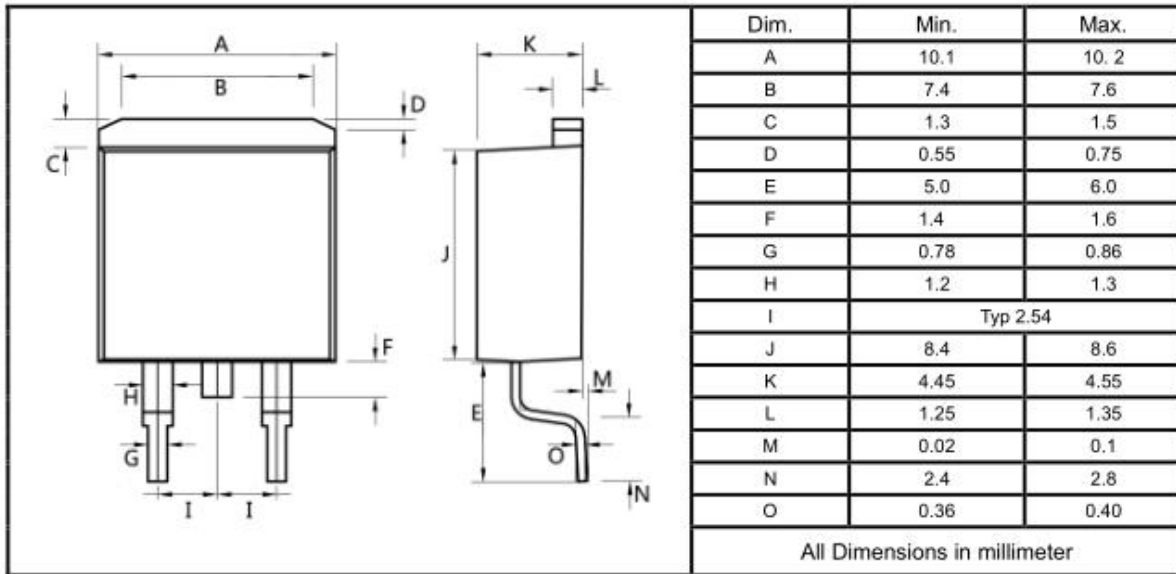
TO-220AB



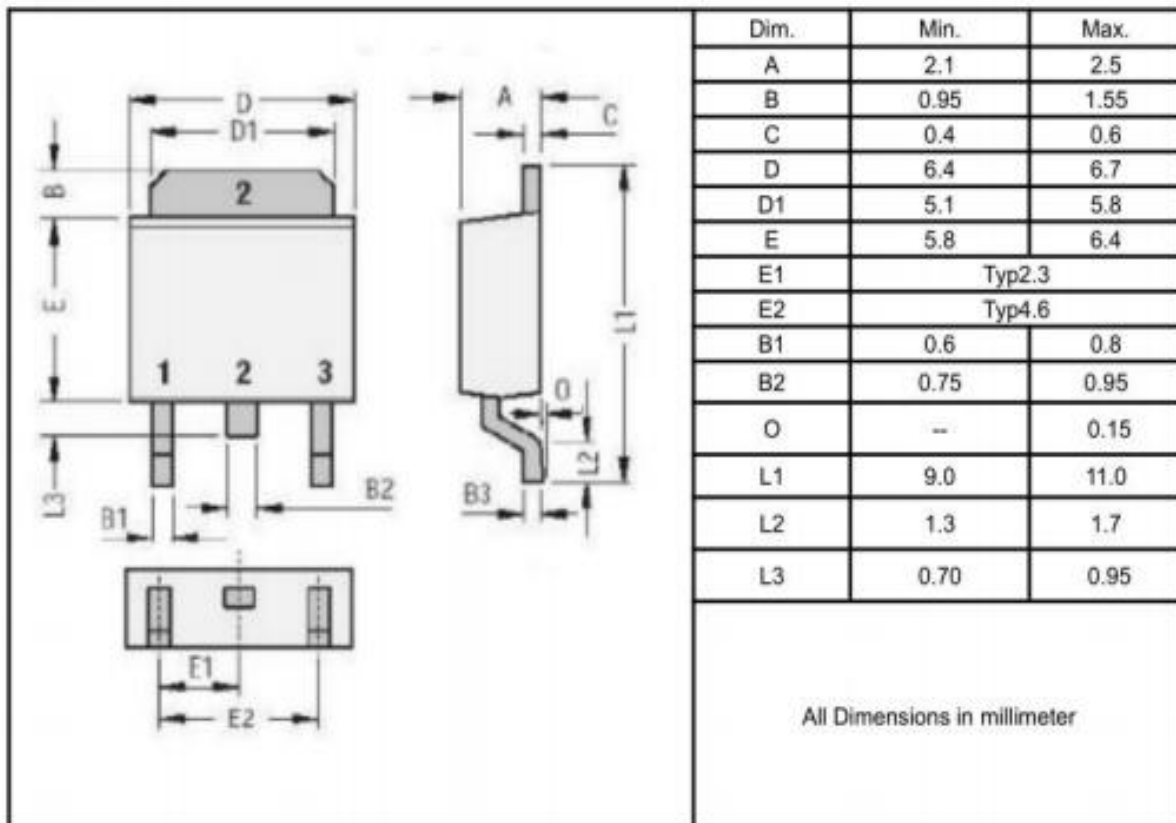
TO-220F



TO-263



TO-252



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [YFW Electronics](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [D83C](#) [BAS16E6433HTMA1](#) [BAT 54-02LRH E6327](#)
[NRVBAF360T3G](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SK310-T](#) [SS3003CH-TL-E](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#)
[MA4E2501L-1290](#) [MBRA140TRPBF](#) [MBRB30H30CT-1G](#) [BAT 15-04R E6152](#) [JANTX1N5712-1](#) [DMJ3940-000](#) [SB007-03C-TB-E](#)
[SK33B-TP](#) [NRVBB20100CTT4G](#) [NRVBM120LT1G](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#)
[ACDBA1200-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#)
[MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [NRVBM120ET1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#)
[PDS1040Q-13](#) [B160BQ-13-F](#) [SDM05U20CSP-7](#) [B140S1F-7](#) [HSM560Je3/TR13](#)