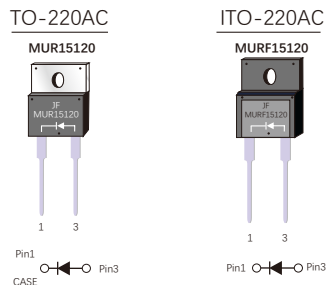
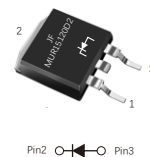


## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Ultrafast Recovery Time
- High surge current capability
- For use in free wheeling, snubber, clamp, inversion welder, PFC, Plating Power Supply
- High temperature soldering guaranteed: 260°C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2015/863/EU



TO-263  
MUR15120D2



## MECHANICAL DATA

- Case: JEDEC TO-220AC、ITO-220AC、TO-263 molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting Position: Any

## ABSOLUTE MAXIMUM RATINGS (T<sub>c</sub>=25°C unless otherwise specified)

Symbol	Parameter/Test Conditions		Values	Unit
V <sub>R</sub>	Maximum DC blocking voltage		1200	V
V <sub>RRM</sub>	Maximum repetitive peak reverse voltage		1200	V
I <sub>F(AV)</sub>	Average forward current	T <sub>c</sub> =120°C	15	A
I <sub>F(RMS)</sub>	RMS forward current	T <sub>c</sub> =120°C	21	A
I <sub>FSM</sub>	NON Repetitive Surge Forward Current	T <sub>j</sub> =25°C, t=8.3ms, Half Sine Wave	150	A
T <sub>J</sub>	Junction temperature		-55 to +175	°C
T <sub>STG</sub>	Storage temperature range		-55 to +175	°C
Torque	Module to Sink	Recommended(M3)	1.1	Nm
R <sub>θJC</sub>	Junction to Case Thermal Resistance	TO-220AC/TO-263 ITO-220AC	1.7 3.5	°C/W

ELECTRICAL CHARACTERISTICS (T<sub>C</sub>=25°C unless otherwise specified)

Symbol	Parameter/Test Conditions		Min.	Typ.	Max.	Unit
I <sub>RM</sub>	Maximum Reverse Leakage Current	V <sub>R</sub> =1200V	-	-	5.0	μA
I <sub>RM</sub>	Maximum Reverse Leakage Current	V <sub>R</sub> =1200V, T <sub>j</sub> =125°C	-	-	0.25	mA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =15A	-	2.0	2.4	V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =15A, T <sub>j</sub> =125°C	-	1.6	-	V
t <sub>rr</sub>	Reverse Recovery Time(I <sub>F</sub> =1A, dI <sub>F</sub> /dt=-200A/μs, V <sub>R</sub> =30V)		-	32	-	ns
t <sub>rr</sub>	Reverse Recovery Time(I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>RR</sub> =0.25A)		-	50	60	ns

RATINGS AND CHARACTERISTIC CURVES

FIG.1-Forward Voltage Drop vs Forward Current

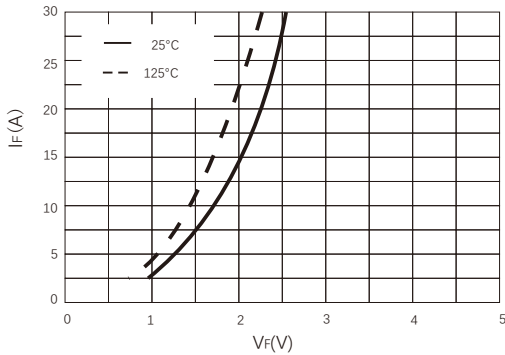


FIG.2-TYPICAL REVERSE CHARACTERISTICS

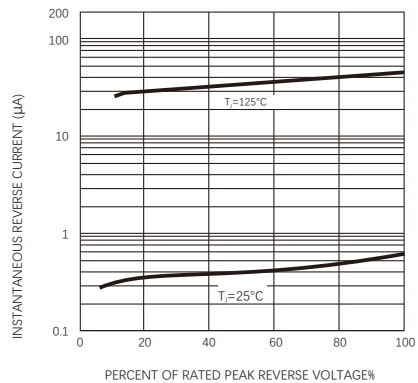


FIG.3-Forward Current vs Case temperature

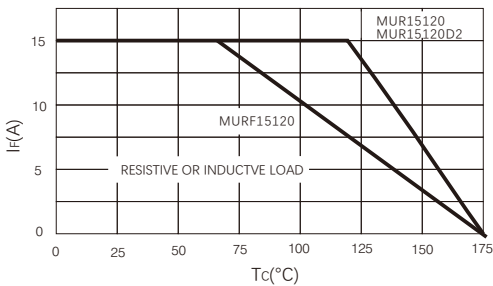
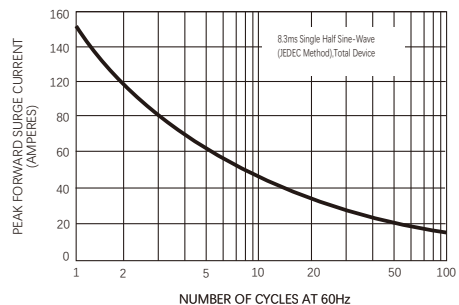
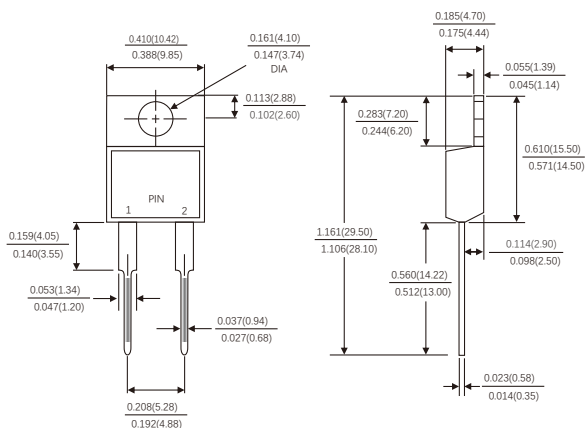


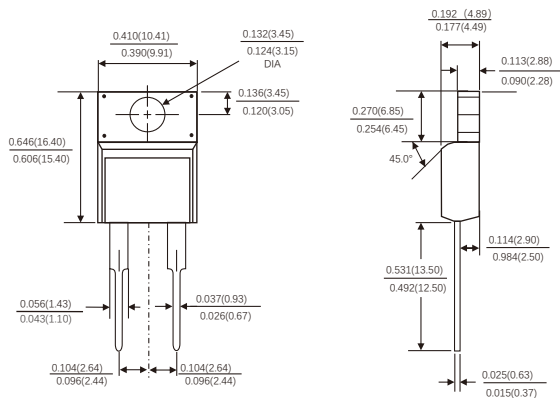
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



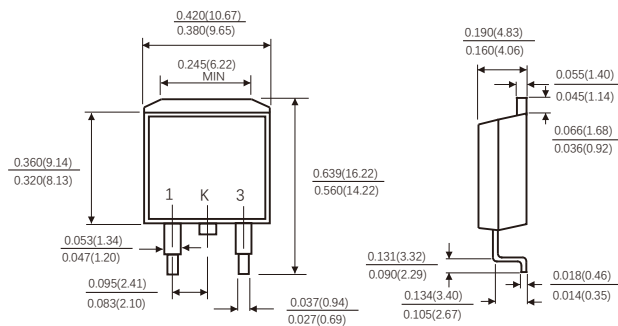
## TO-220AC



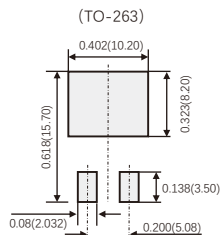
## ITO-220AC



## TO-263



## Suggested Pad Layout



(设计者可参考推荐值根据焊接工艺要求自行确定适合的焊盘尺寸)  
 (Designers can refer to the recommended values according to the manufacturing process requirements to determine the appropriate pad size)

Dimensions in inches and (millimeters)

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