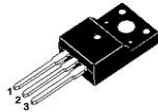
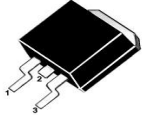


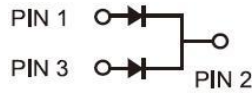
TO-220AB/CT



TO-220F/FCT



TO-263/DC



### FEATURES

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

### APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

### 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

### Primary Characteristic

$I_O$	2*5A
$V_{RRM}$	100V
$I_{FSM}$	80A
$V_F$	0.62V
$T_{jmax}$	150°C

### Maximum Ratings (Per Leg) at $T_a=25^\circ\text{C}$ unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RWM}$	100	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	$I_{FSM}$	80	A
Operating Temperature Range	$T_J$	-50 to +150	°C
Storage Temperature Range	$T_{STG}$	-50 to +150	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263 TO-220F	$R_{\theta_{JC}}$	2	°C/W
		4	

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

### Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit	
		Typ.	Max.		
Forward Voltage Drop(Note2) at $I_F=1\text{A}$ at $I_F=2\text{A}$ at $I_F=5\text{A}$	$V_F$	TA=25°C	0.45	-	V
		TA=125°C	0.36	-	
		TA=25°C	0.51	-	
		TA=125°C	0.46	-	
		TA=25°C	0.67	0.72	
		TA=125°C	0.62	-	
Maximum Reverse Current at $V_R=100\text{V}$	$I_R$	TA=25°C	5	30	μA
		TA=125°C	3	-	mA

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

### RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

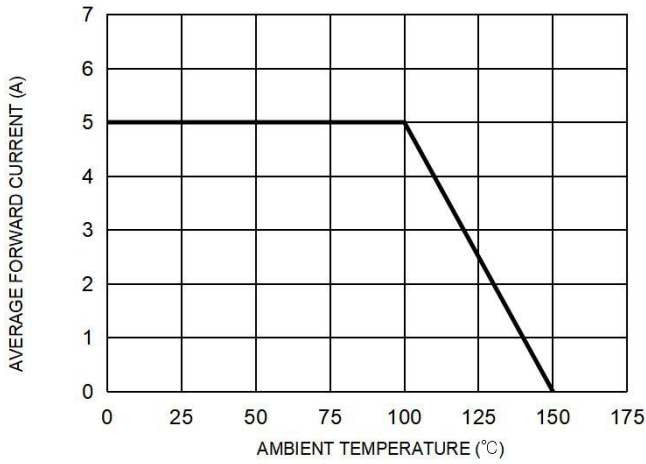


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

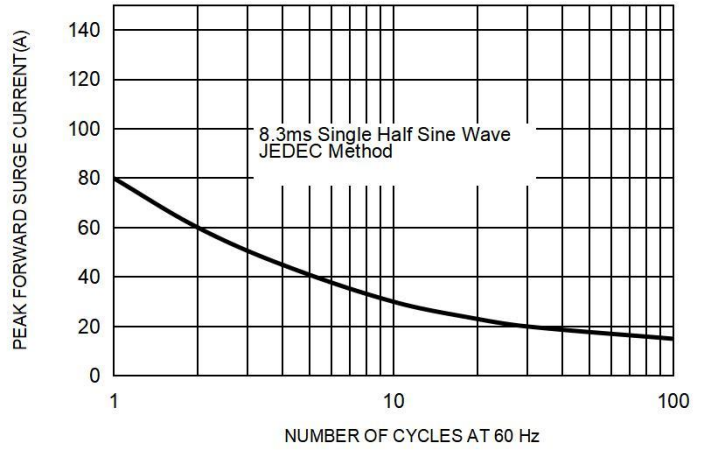


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

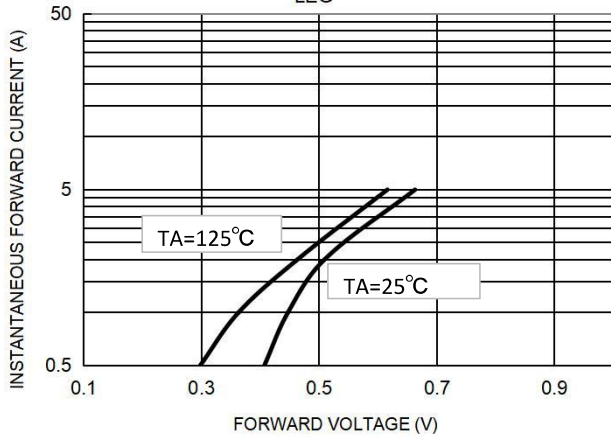
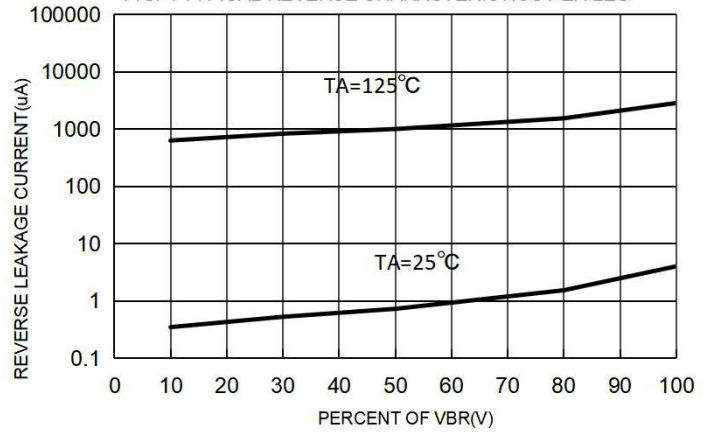
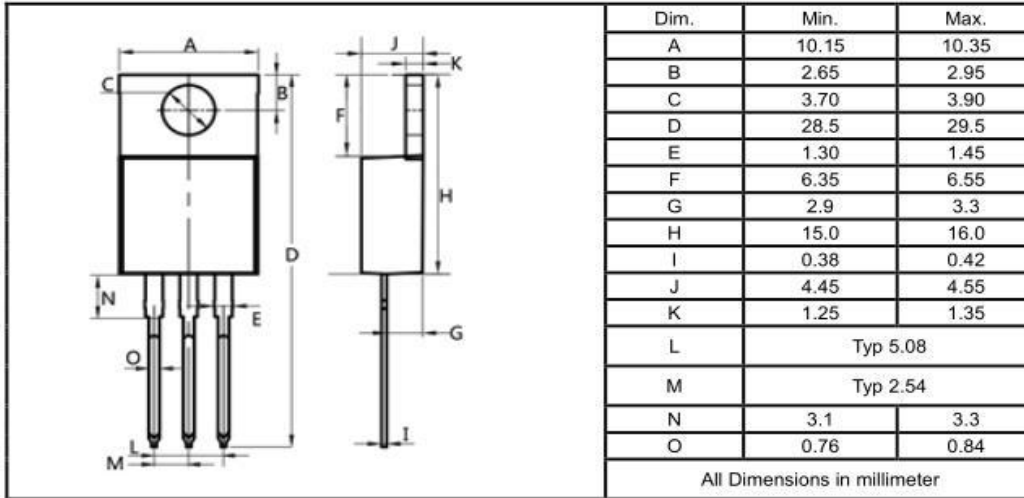


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

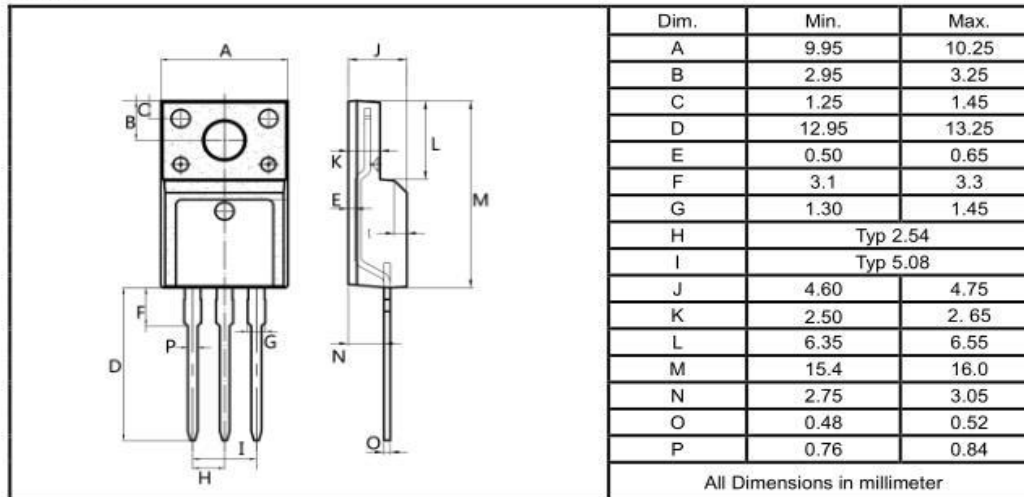


Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

