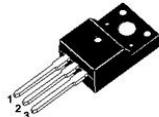
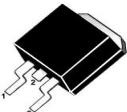


TO-220AB/CT



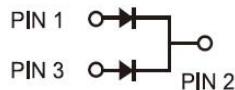
TO-220F/FCT



TO-263/DC



TO-252/CS



### Primary Characteristic

$I_O$	2*5A
$V_{RRM}$	150V
$I_{FSM}$	150A
$V_F$	0.68V
$T_{Jmax}$	150°C

### 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 converters

### 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 (Per Leg) at $T_a=25^\circ C$ unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	150	V
Working Peak Reverse Voltage	$V_{RWM}$	150	V
Maximum DC Blocking Voltage	$V_{DC}$	150	V
Maximum Average Forward Rectified Current	$I_O$	5	A
Total		10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	$I_{FSM}$	150	A
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 to +150	°C
Typical Thermal Resistance (Note1)			
TO-220AB,TO-263,TO-252	$R_{\theta JC}$	2	°C/W
TO-220F		4	

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

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

Characteristics	Symbol	Value	Unit
Forward Voltage Drop(Note2)	$V_F$	Typ.	
at $I_F=2A$		TA=25°C	
		0.73	-
		TA=125°C	
		0.59	-
at $I_F=3A$		TA=25°C	
		0.76	-
		TA=125°C	
		0.63	-
at $I_F=5A$		TA=25°C	
		0.80	0.87
		TA=125°C	
		0.68	-
Maximum Reverse Current at $V_R=150V$	$I_R$	1	μA
		TA=125°C	
		0.6	-
			mA

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

## RATINGS AND CHARACTERISTIC CURVES

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

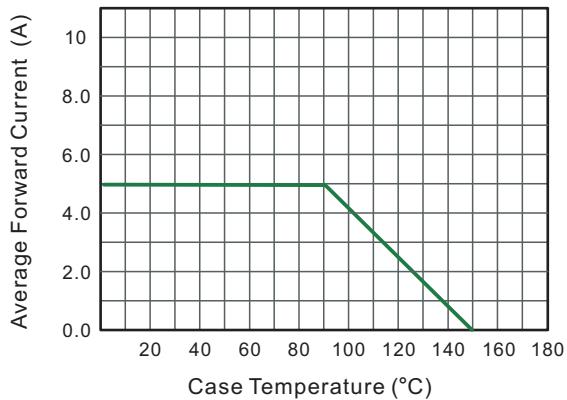


Fig.2 Typical Reverse Characteristics

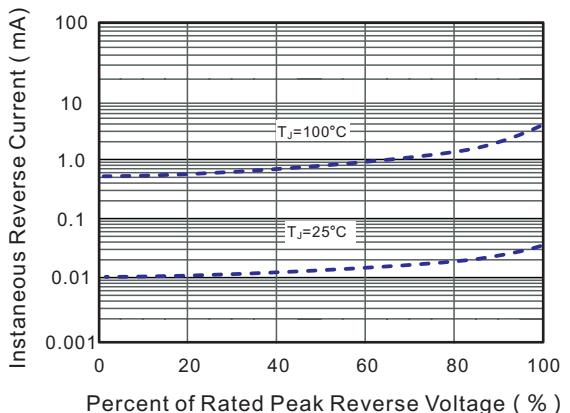


Fig.3 Typical Forward Characteristic

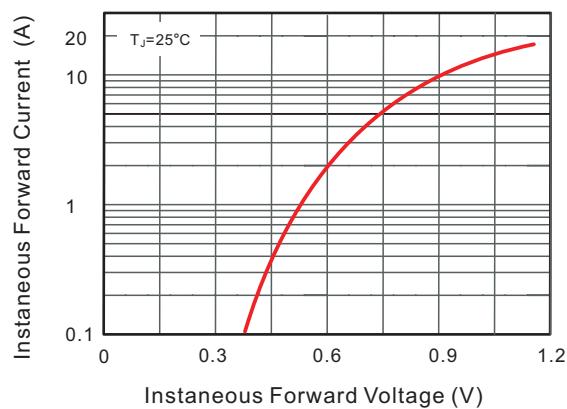
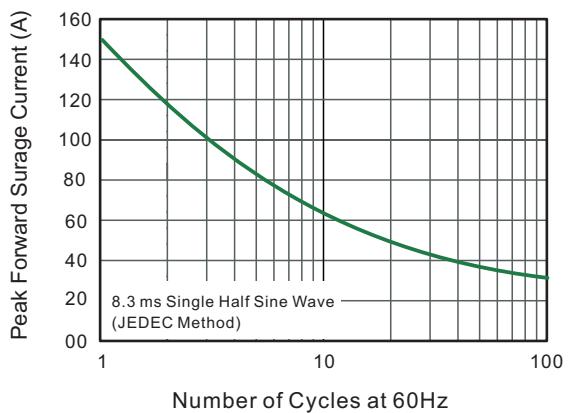
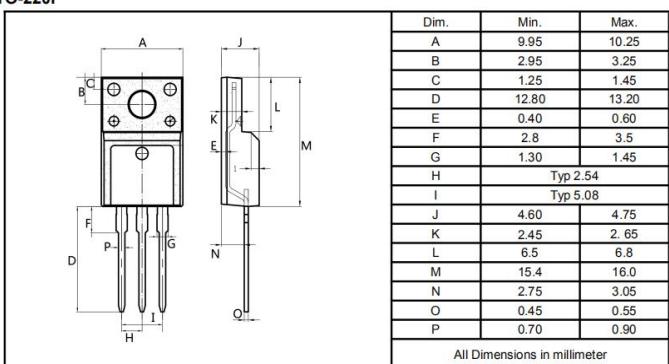


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

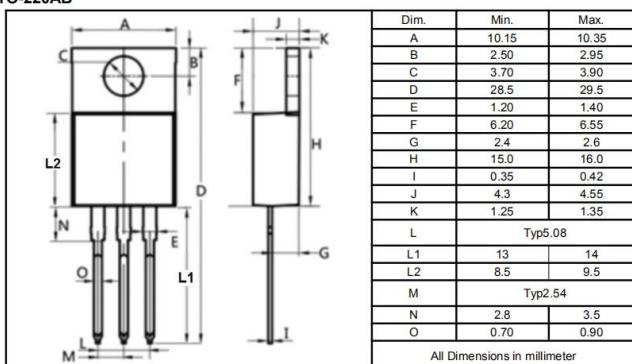


**Package Outline Dimensions millimeters**

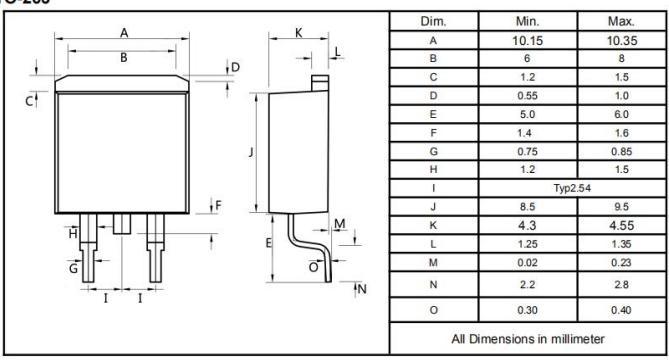
TO-220F



TO-220AB



TO-263



TO-252

