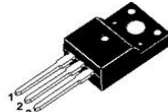
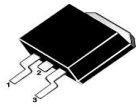


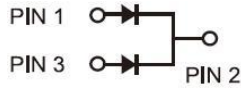
TO-220AB/CT



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*20A
$V_{RRM}$	60V
$I_{FSM}$	250A
$V_F$	0.49V
$T_{Jmax}$	150°C

### Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$	60	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current	Per Leg	20	A
		Total	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250	A
Operating Temperature Range	$T_J$	-50 to +150	°C
Storage Temperature Range	$T_{STG}$	-50 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
		4	
TO-220AB,TO-263			
TO-220F			

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)	$V_F$	at $I_F=5A$	TA=25°C	0.38	-
			TA=125°C	0.28	-
		at $I_F=10A$	TA=25°C	0.44	-
			TA=125°C	0.36	-
		at $I_F=20A$	TA=25°C	0.53	0.60
			TA=125°C	0.49	-
Maximum Reverse Current at $V_R=60V$	$I_R$	TA=25°C	75	200	μA
		TA=125°C	2.1	-	mA

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

### RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

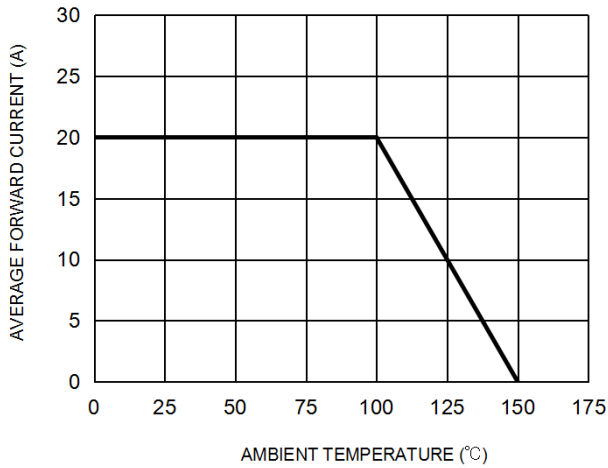


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

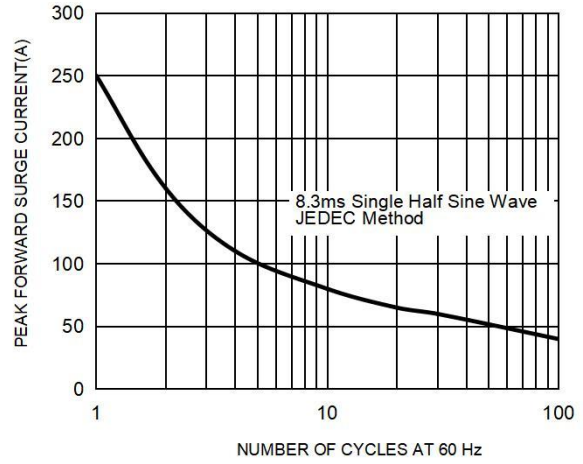


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

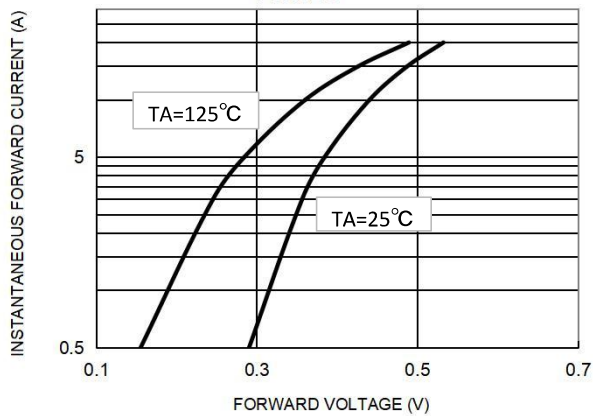
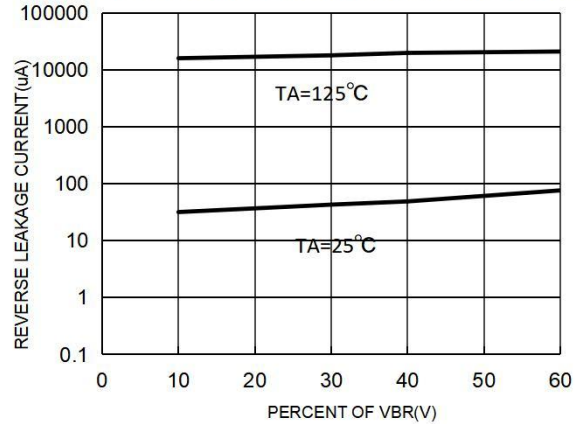
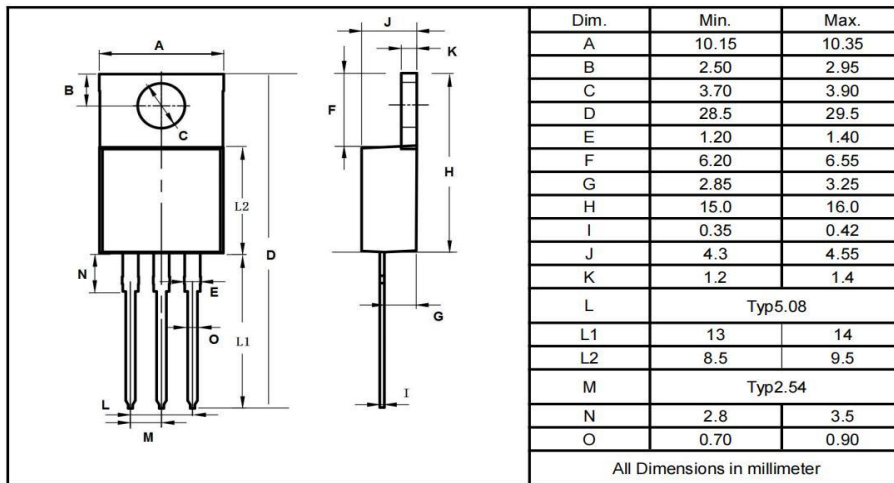


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

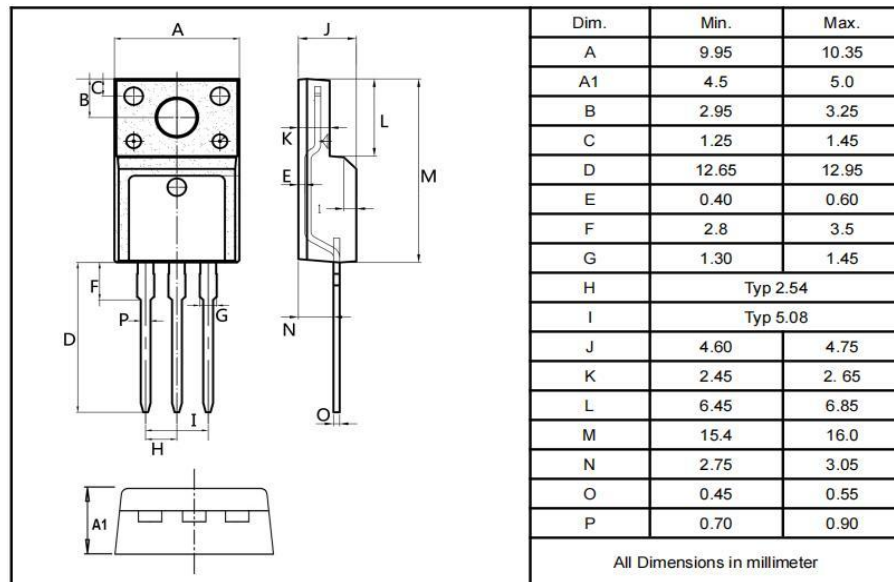


### Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

