

Low VF Schottky Barrier Rectifiers

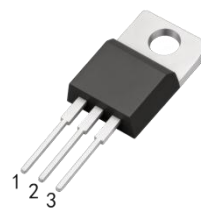
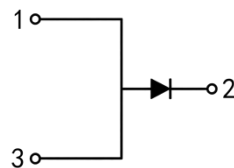
Parameter	Value	Unit
V_{RRM}	45	V
$I_{F(AV)}$	10	A

Features

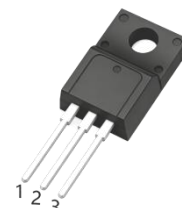
- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

Applications

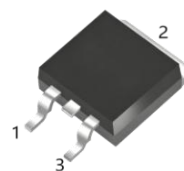
- Power adapters
- Lighting equipment
- On-board DC/DC converters



TO-220AB/CT



TO-220F/FCT



TO-263/DC



TO-252/CS

Absolute Maximum Ratings(Per Leg) (Ta=25°C,unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	180	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-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

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=10A$	$T_A=25^{\circ}C$		0.46	0.55	
	$T_A=125^{\circ}C$		0.43	-	
Maximum Reverse Current at $V_R=45V$	$T_A=25^{\circ}C$	I_R	50	100	μA
	$T_A=125^{\circ}C$		9	-	mA

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

Typical Characteristics

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

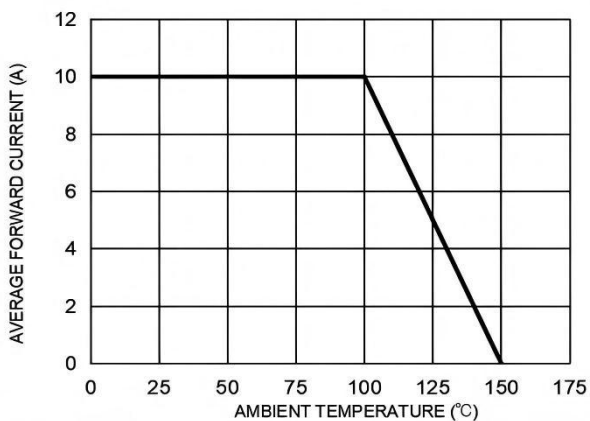


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

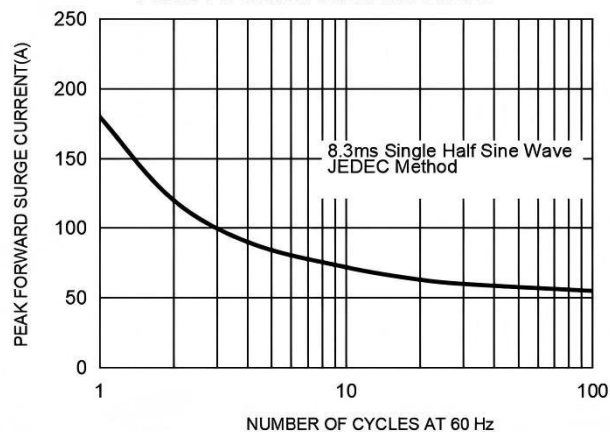


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

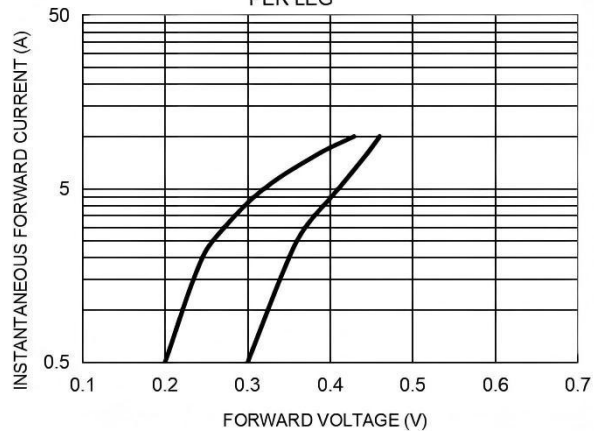
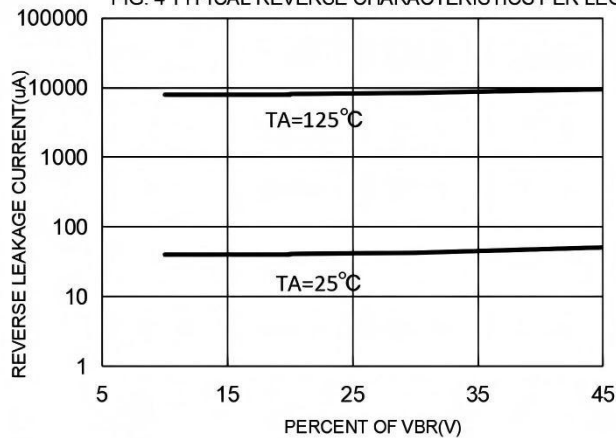
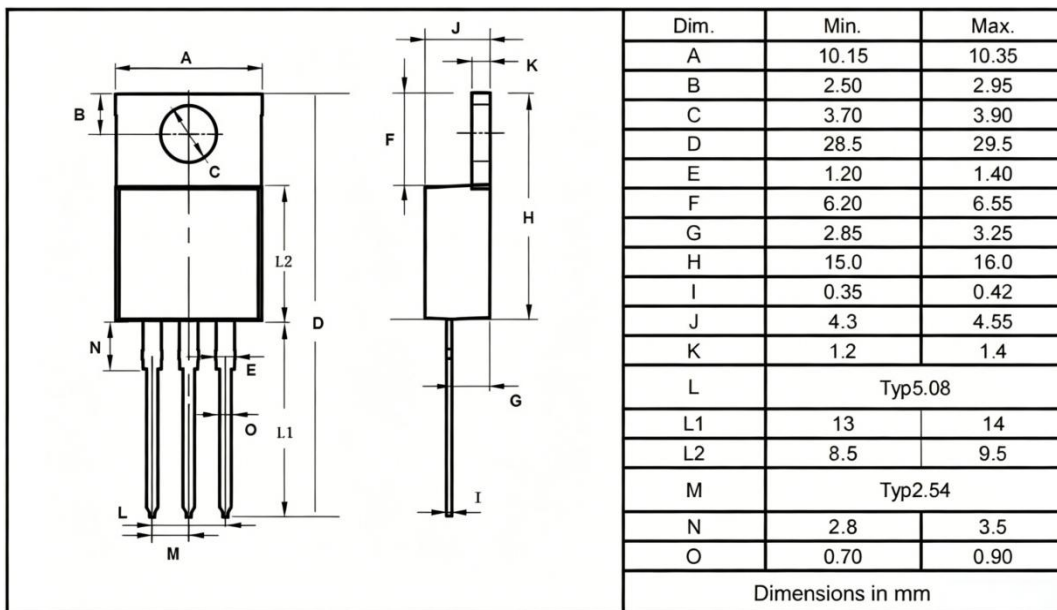


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

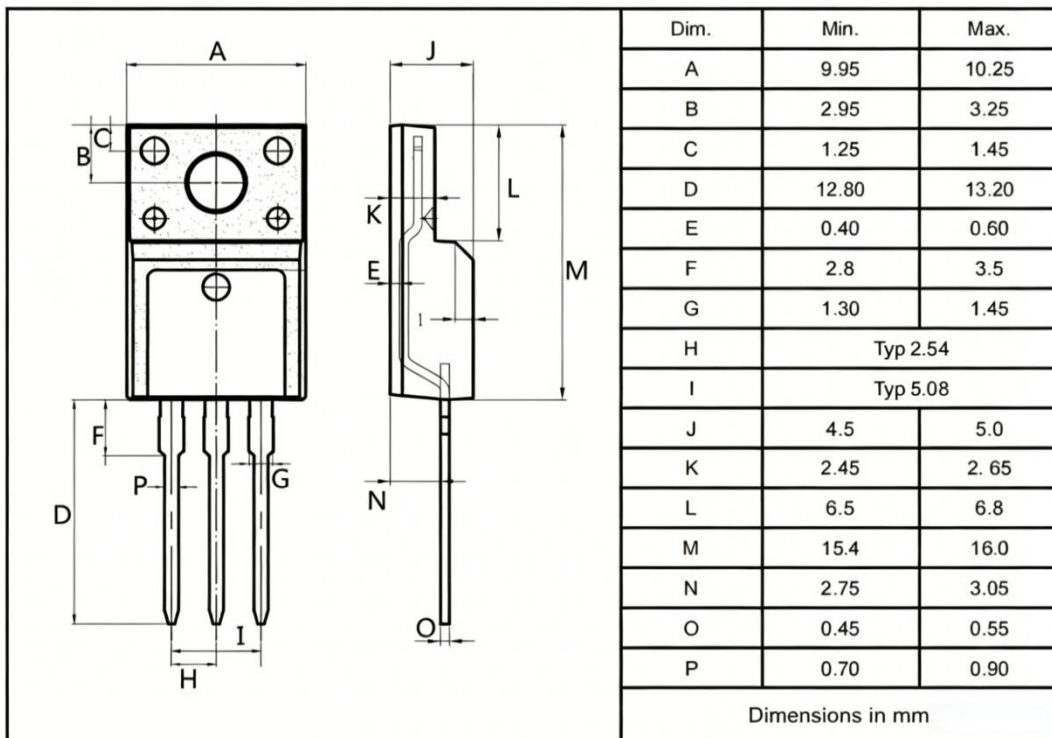


Package Outlines

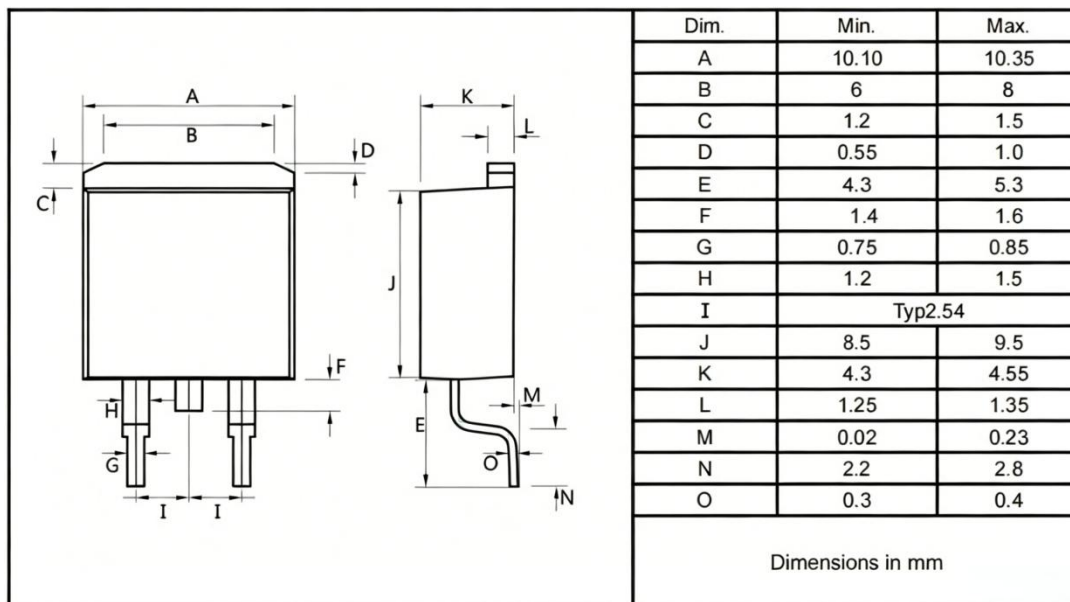
TO-220AB



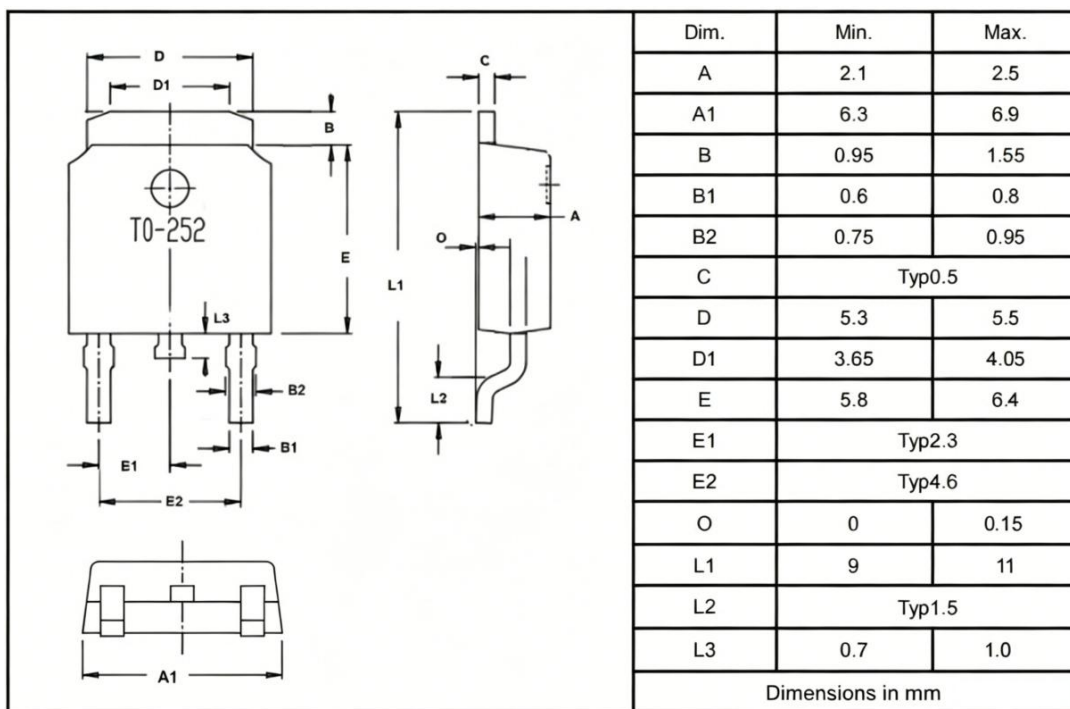
TO-220F



TO-263



TO-252



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