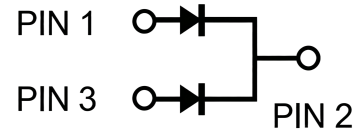


## Ultrafast Recovery Rectifiers

Parameter	Value	Unit
$V_{RRM}$	400	V
$I_{F(AV)}$	20(2*10)	A

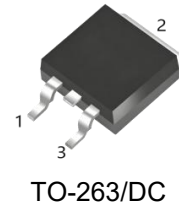
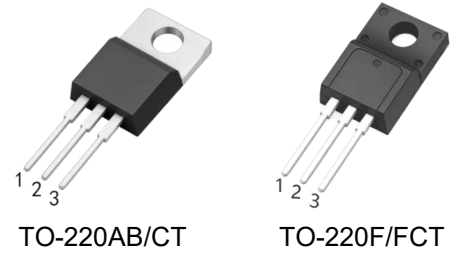


### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

### Applications

- Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.



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

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	400	V
Working Peak Reverse Voltage	$V_{RWM}$	400	V
Maximum DC Blocking Voltage	$V_{DC}$	400	V
Maximum Average Forward Rectified Current	Per Leg	10	A
	Total	20	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	240	A
Operating Temperature Range	$T_J$	175	°C
Storage Temperature Range	$T_{STG}$	-55 to +175	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$		°C/W
TO-220AB, TO-263		2	
TO-220F		4	

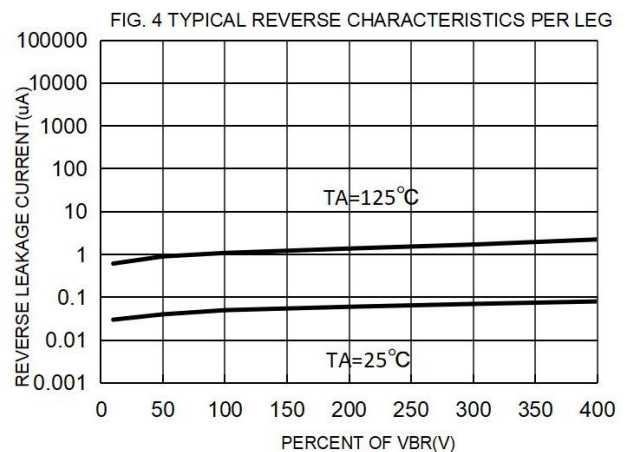
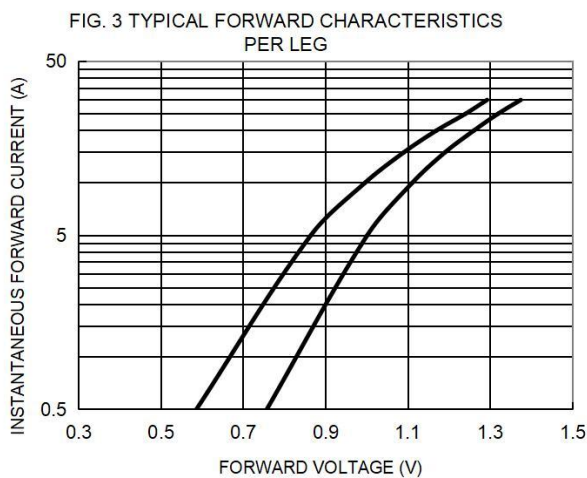
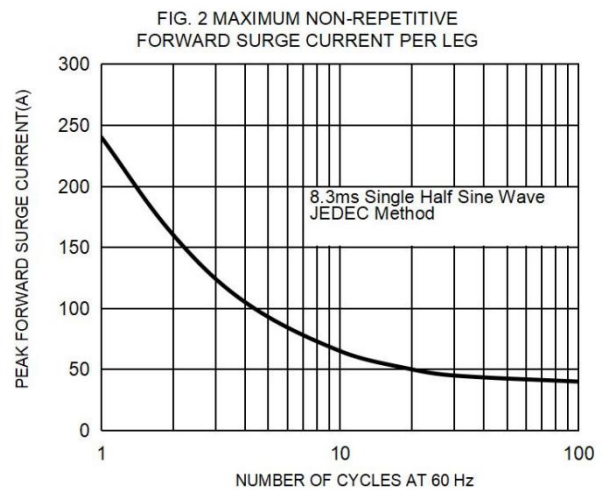
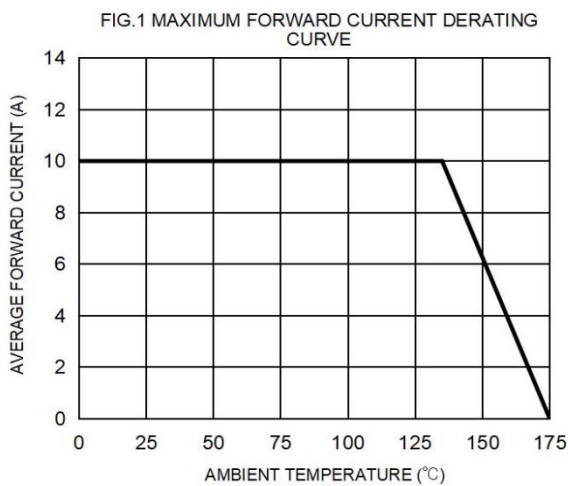
Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

## Electrical Characteristics(Per Leg) unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		$V_F$	Typ.	Max.	V
at $I_F=10A$	$T_A=25^{\circ}C$		1.11	1.20	
	$T_A=125^{\circ}C$		1.00	-	
Maximum Reverse Current at $V_R=400V$	$T_A=25^{\circ}C$	$I_R$	0.1	2	$\mu A$
	$T_A=125^{\circ}C$		3	-	$\mu A$
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A$		$T_{rr}$	25	35	ns

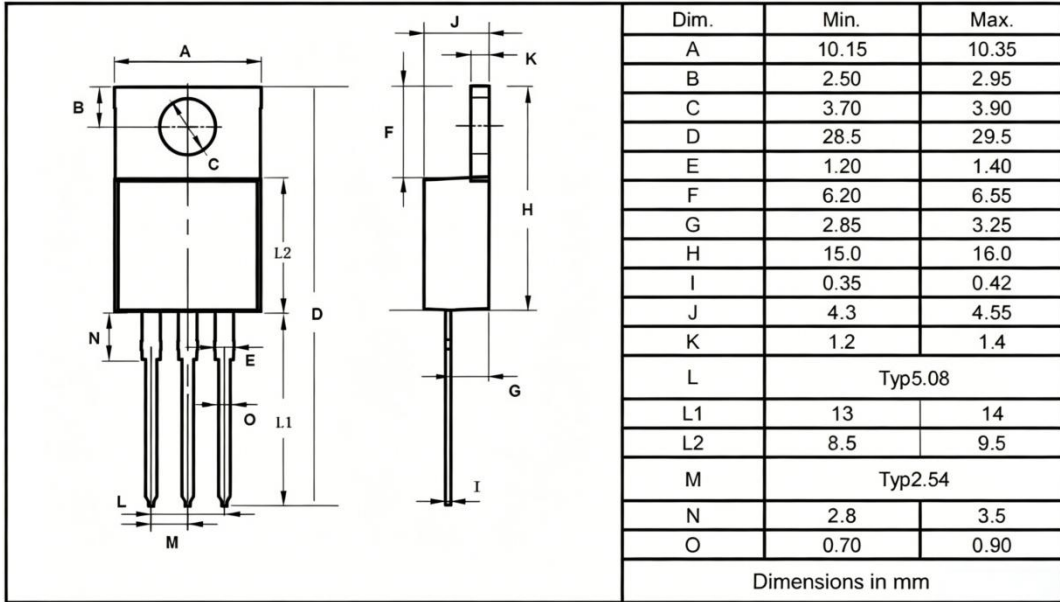
Note2: Pulse test: 300 $\mu s$  pulse width, 1% duty cycle

## Typical Characteristics

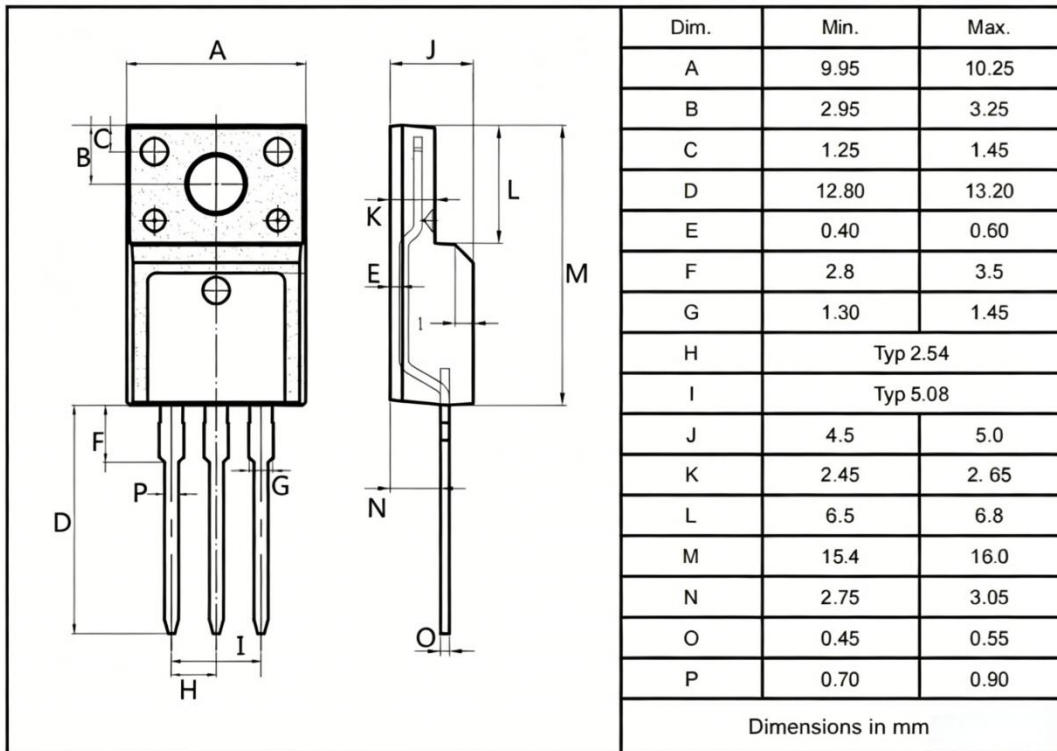


**Package Outlines**

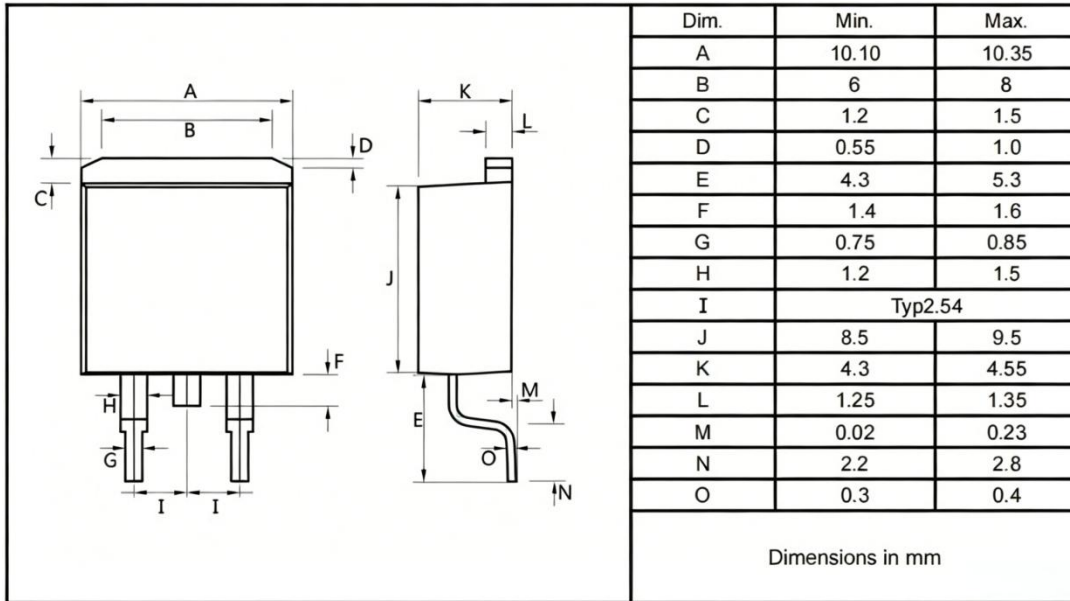
**TO-220AB**



**TO-220F**



**TO-263**



**\*Important Usage Information and Disclaimer**

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