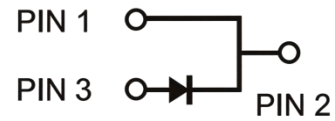


## Ultrafast Recovery Rectifiers

Parameter	Value	Unit
$V_{RRM}$	600	V
$I_{F(AV)}$	15	A

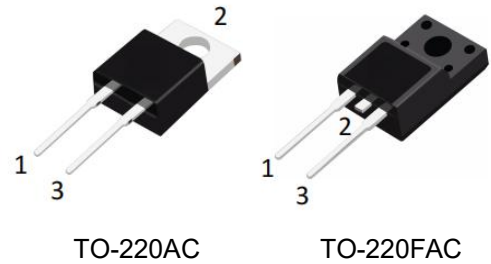


### Features

- 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	$V_{RRM}$	600	V
Working Peak Reverse Voltage	$V_{RWM}$	600	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	15	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	270	A
Operating Temperature Range	$T_J$	175	°C
Storage Temperature Range	$T_{STG}$	-55 to +175	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
TO-220AC		4	
TO-220FAC			

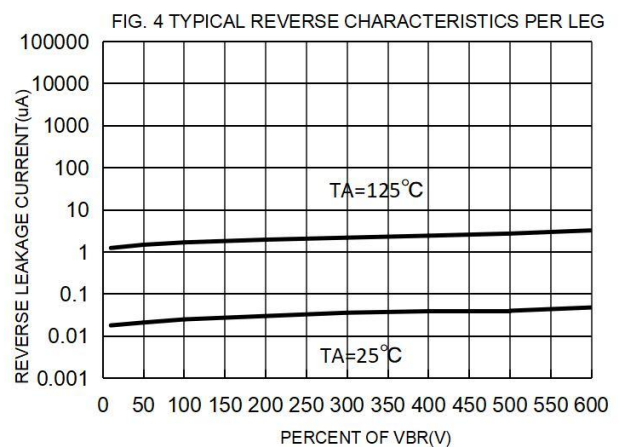
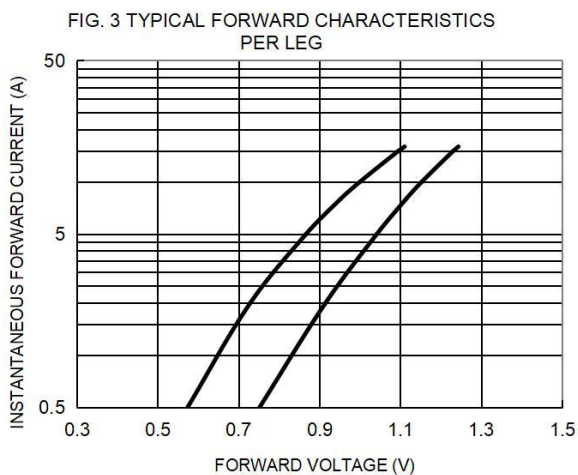
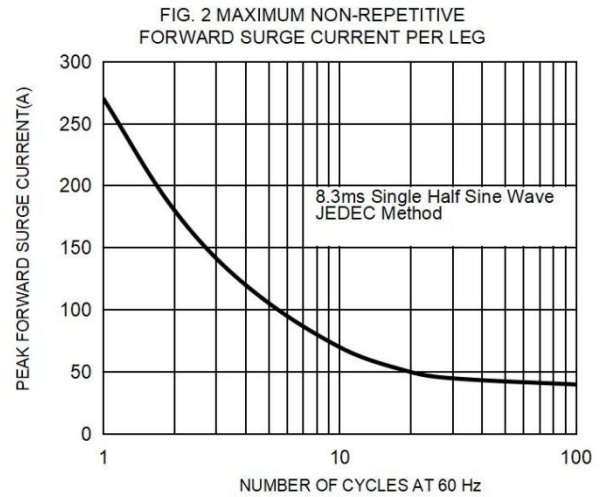
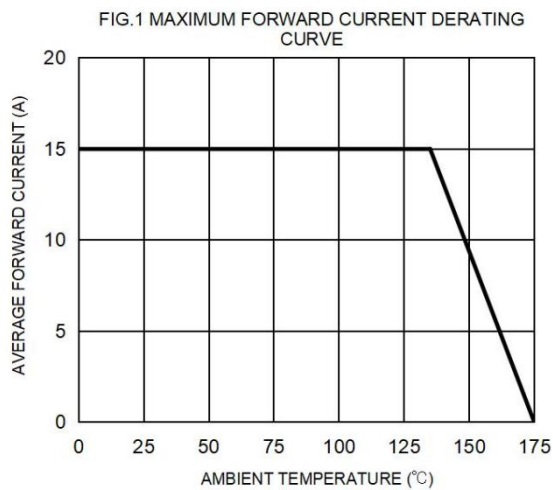
Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

## Electrical Characteristics unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		$V_F$	Typ.	Max.	V
at $I_F=15A$	$T_A=25^\circ C$		1.23	1.6	
	$T_A=125^\circ C$		1.09	-	
Maximum Reverse Current at $V_R=600V$	$T_A=25^\circ C$	$I_R$	0.1	2	$\mu A$
	$T_A=125^\circ C$		3.5	-	$\mu A$
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A$		$T_{rr}$	32	40	ns

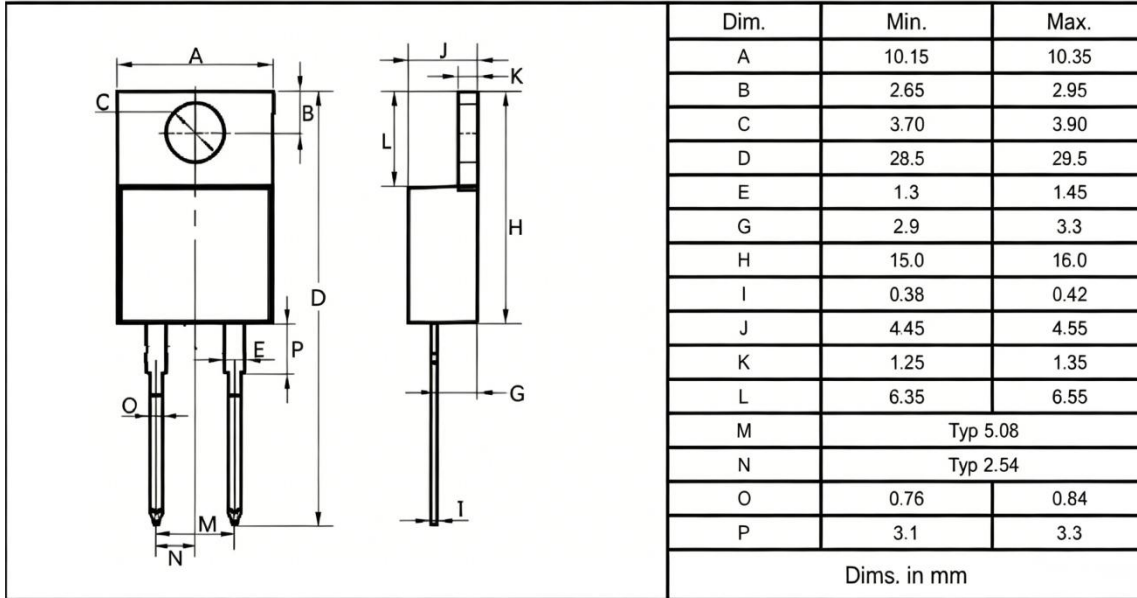
Note2:Pulse test: 300 $\mu s$  pulse width, 1% duty cycle

## Typical Characteristics

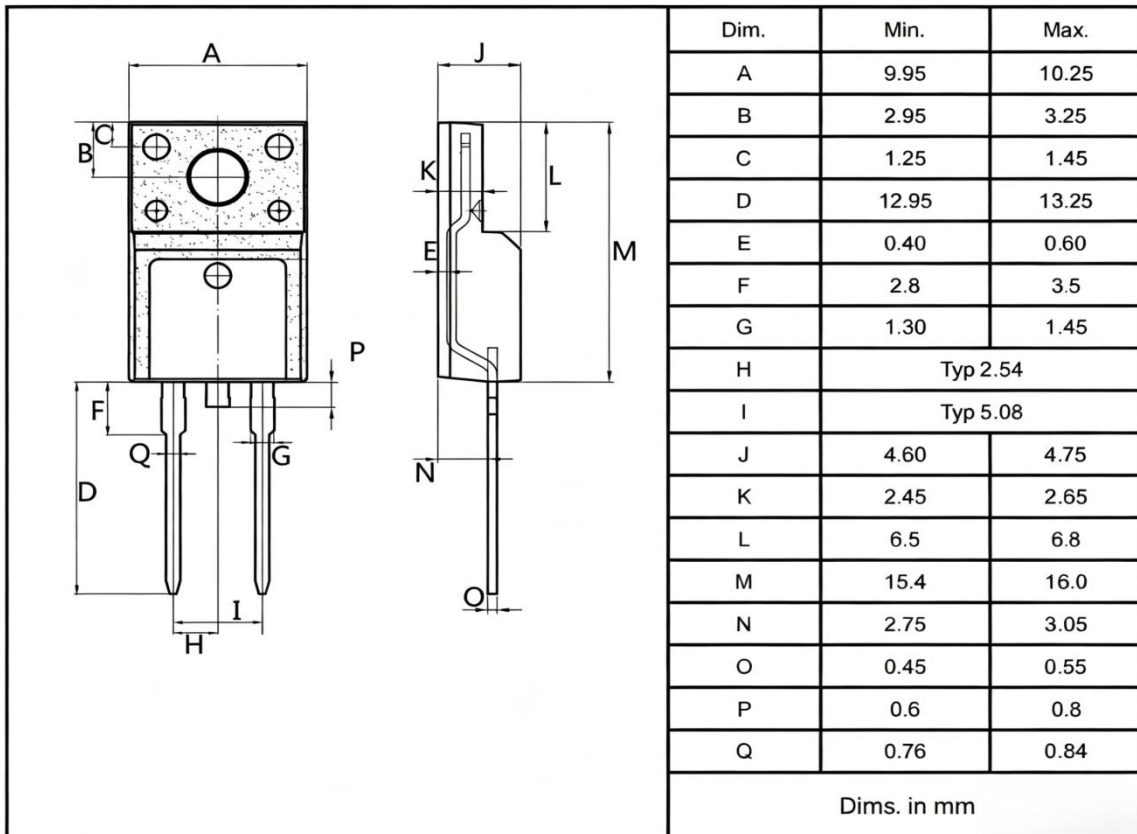


**Package Outlines**

**TO-220AC**



**TO-220FAC**



**\*Important Usage Information and Disclaimer**

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