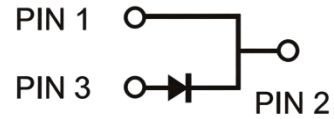


### Ultrafast Recovery Rectifiers

Parameter	Value	Unit
$V_{RRM}$	600	V
$I_{F(AV)}$	8	A

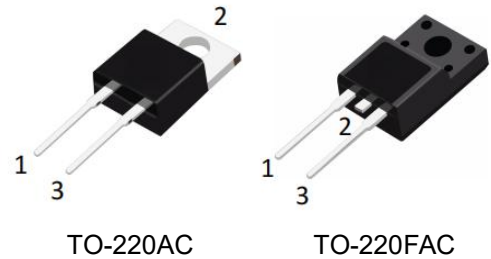


### Features

- 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	$I_{F(AV)}$	8	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	160	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			

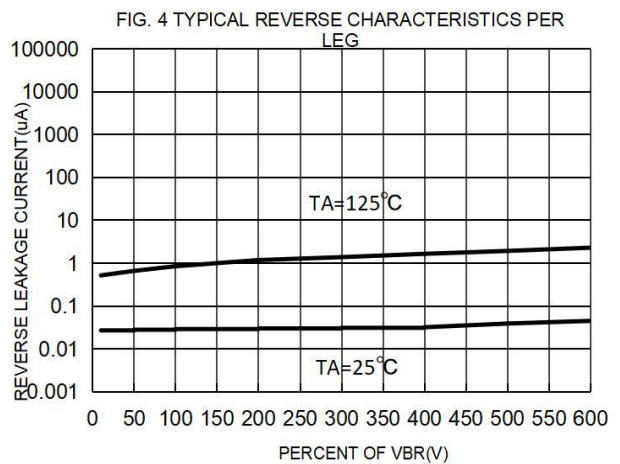
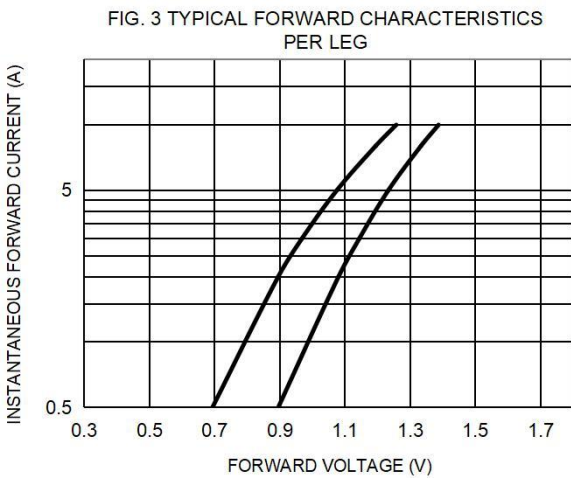
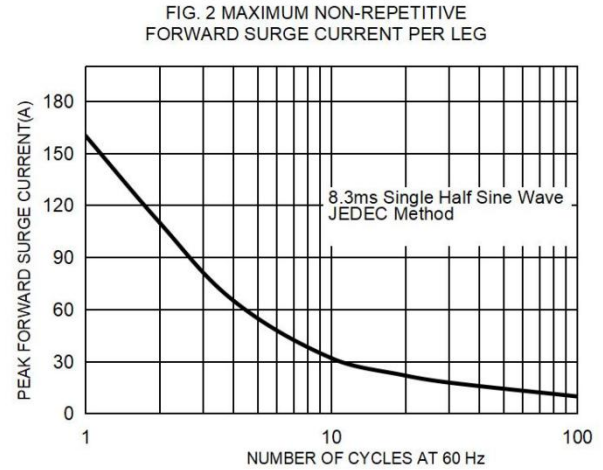
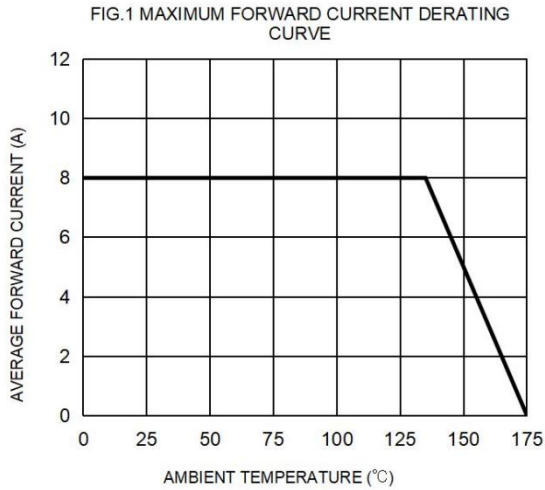
Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

**Electrical Characteristics unless otherwise specified**

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		$V_F$	Typ.	Max.	V
at $I_F=8A$	$T_A=25^{\circ}C$		1.33	1.6	
	$T_A=125^{\circ}C$		1.19	-	
Maximum Reverse Current at $V_R=600V$	$T_A=25^{\circ}C$	$I_R$	0.1	2	$\mu A$
	$T_A=125^{\circ}C$		2.5	-	$\mu A$
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A$		$T_{rr}$	31	35	ns

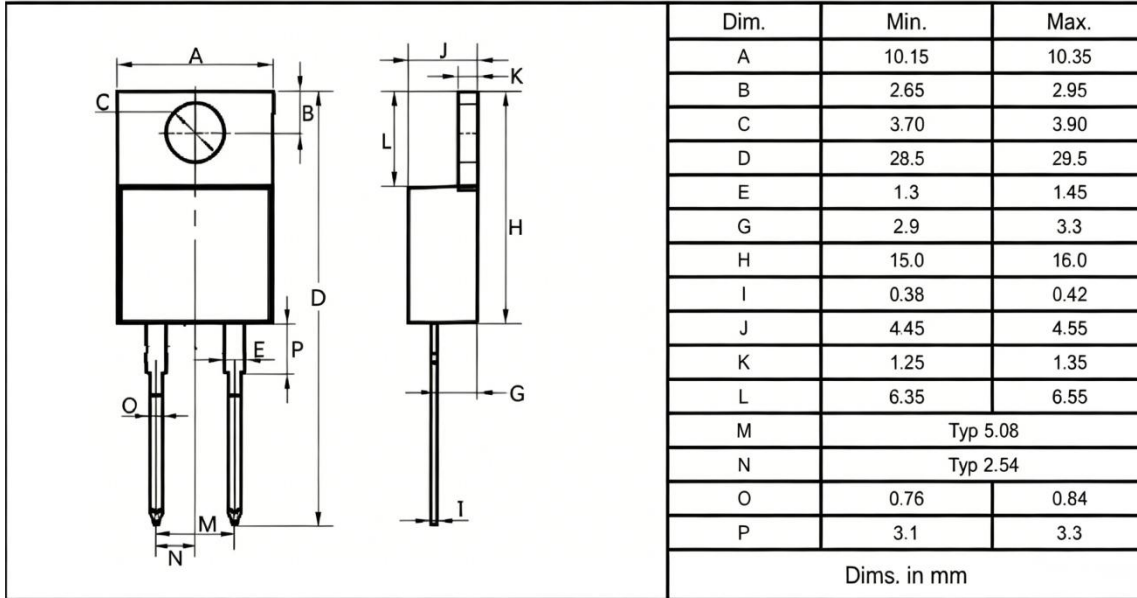
Note2:Pulse test: 300 $\mu s$  pulse width, 1% duty cycle

**Typical Characteristics**

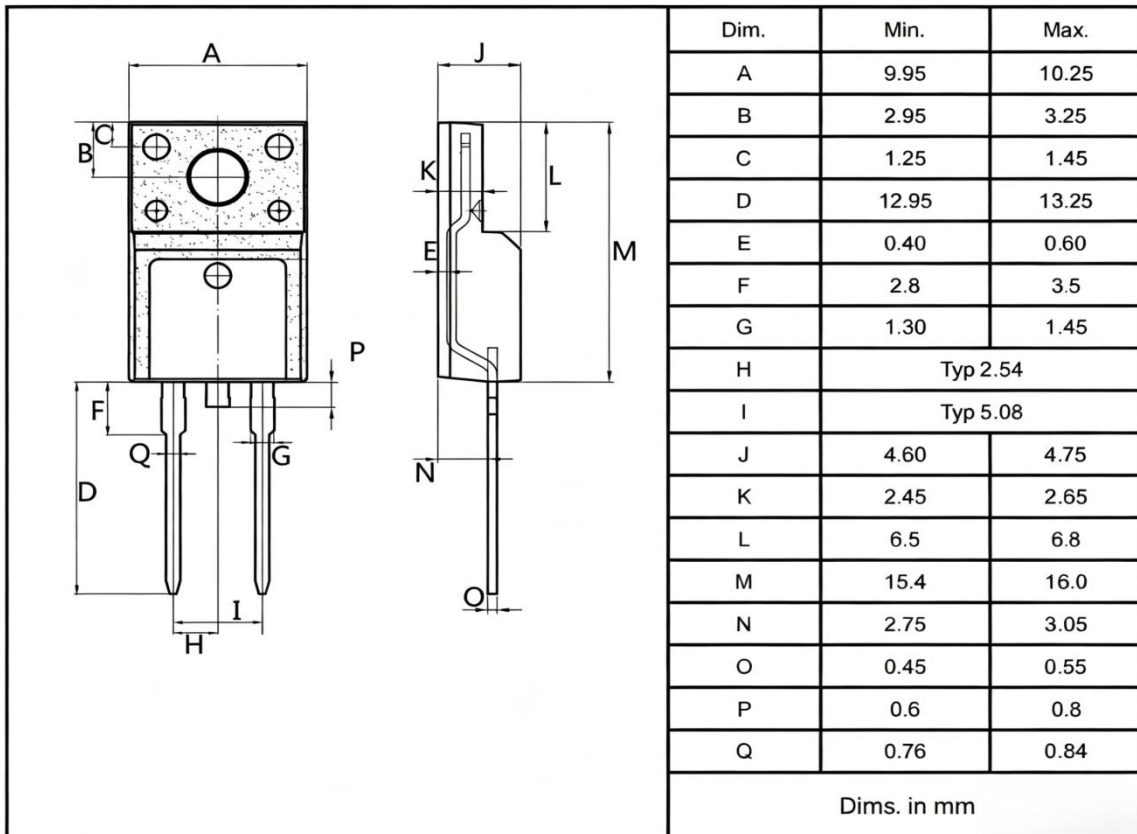


### Package Outlines

#### TO-220AC



#### TO-220FAC



**\*Important Usage Information and Disclaimer**

The specifications of Zhuhai Hypersemi Co., Ltd. products are not guarantees of product characteristics. They reflect typical performance expected in standard applications, which may vary with specific uses. Users must conduct prior testing for their applications and make necessary adjustments.

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