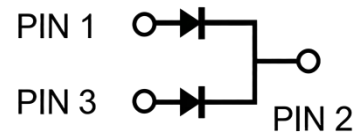


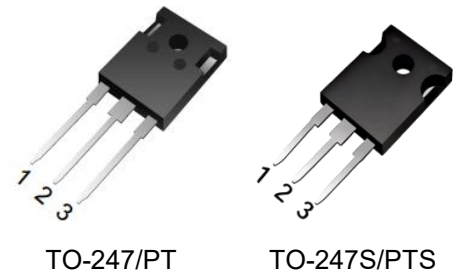
## Ultrafast Recovery Rectifiers

Parameter	Value	Unit
$V_{RRM}$	600	V
$I_{F(AV)}$	60(2*30)	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	Per Leg	30	A
	Total	60	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	390	A
Operating Temperature Range	$T_J$	175	°C
Storage Temperature Range	$T_{STG}$	-50 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

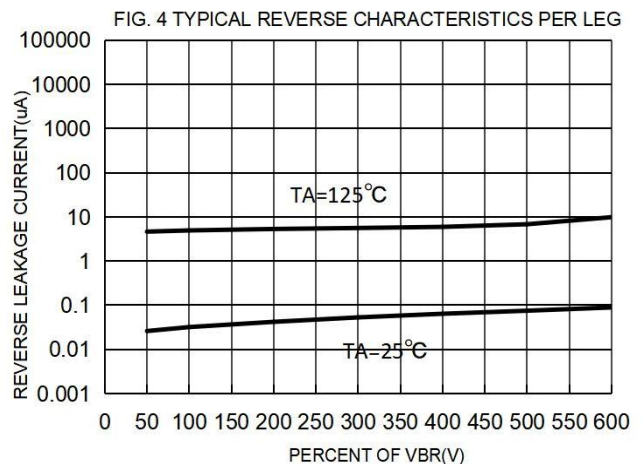
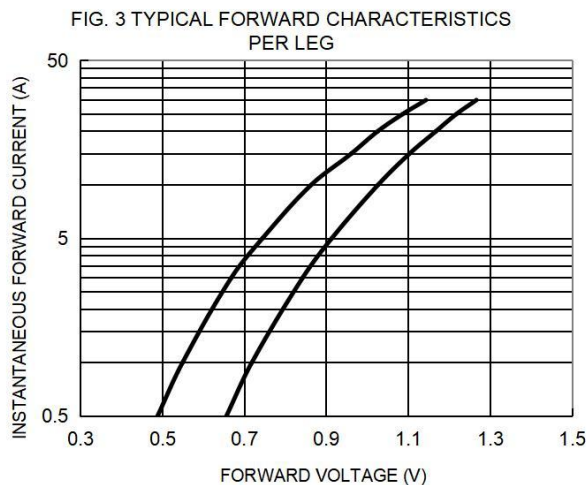
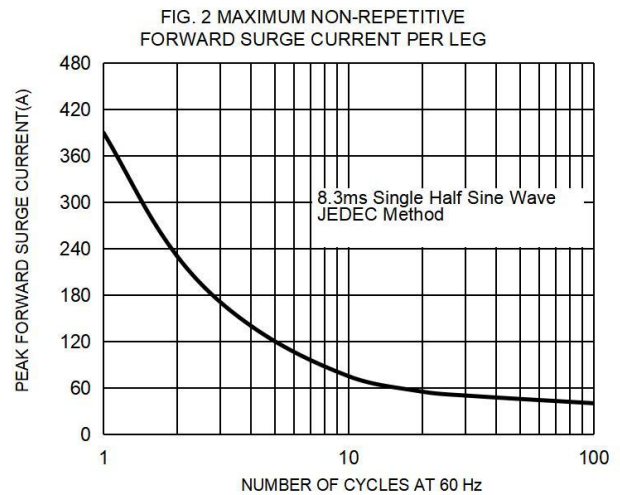
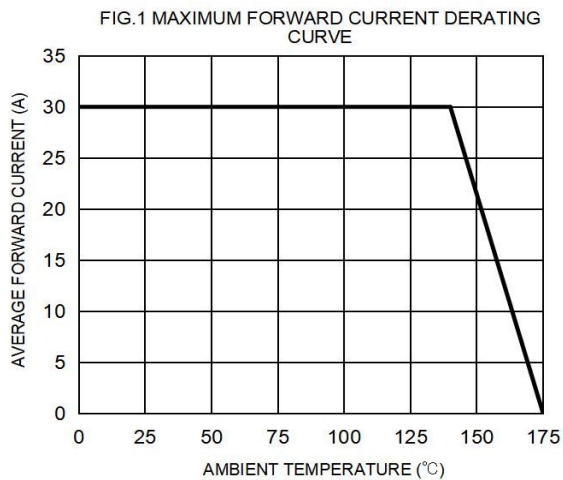
Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

### Electrical Characteristics(Per Leg) unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		$V_F$	Typ.	Max.	V
at $I_F=30A$	$T_A=25^\circ C$		1.27	1.60	
	$T_A=125^\circ C$		1.14	-	
Maximum Reverse Current at $V_R=600V$	$T_A=25^\circ C$	$I_R$	0.1	2	$\mu A$
	$T_A=125^\circ C$		10	-	$\mu A$
Maximum Reverse Recovery Time at $I_F=0.5A, I_R=1A$		$T_{rr}$	42	55	ns

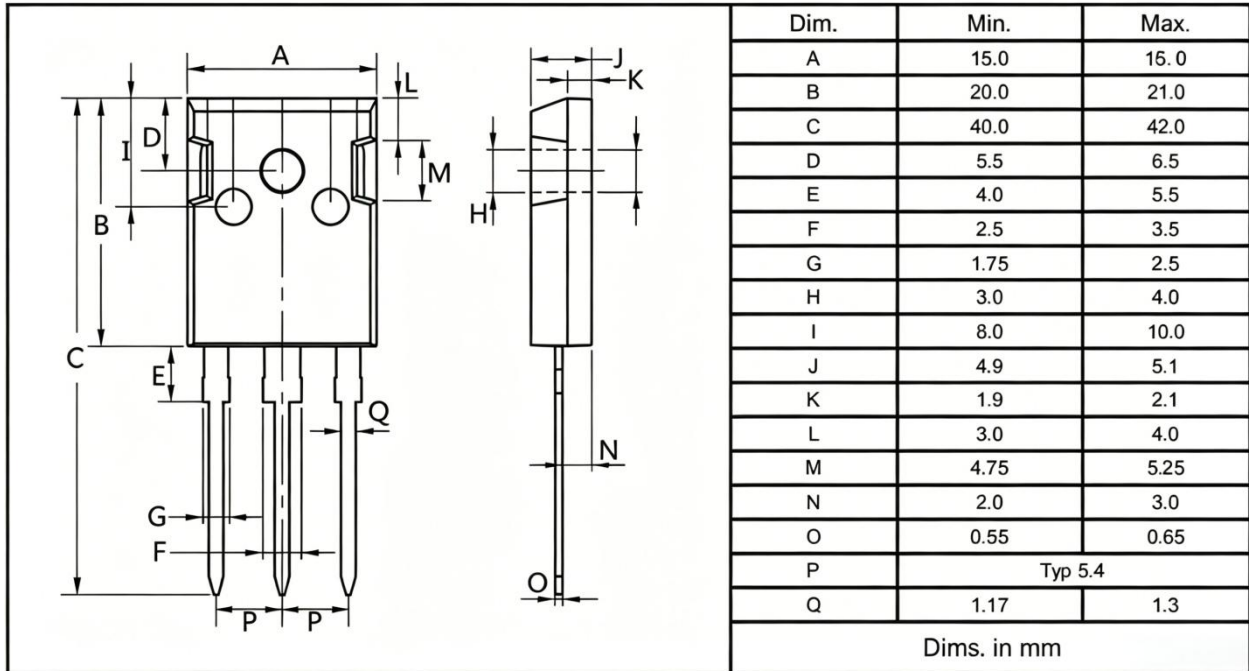
Note2:Pulse test: 300  $\mu s$  pulse width, 1 % duty cycle

### Typical Characteristics

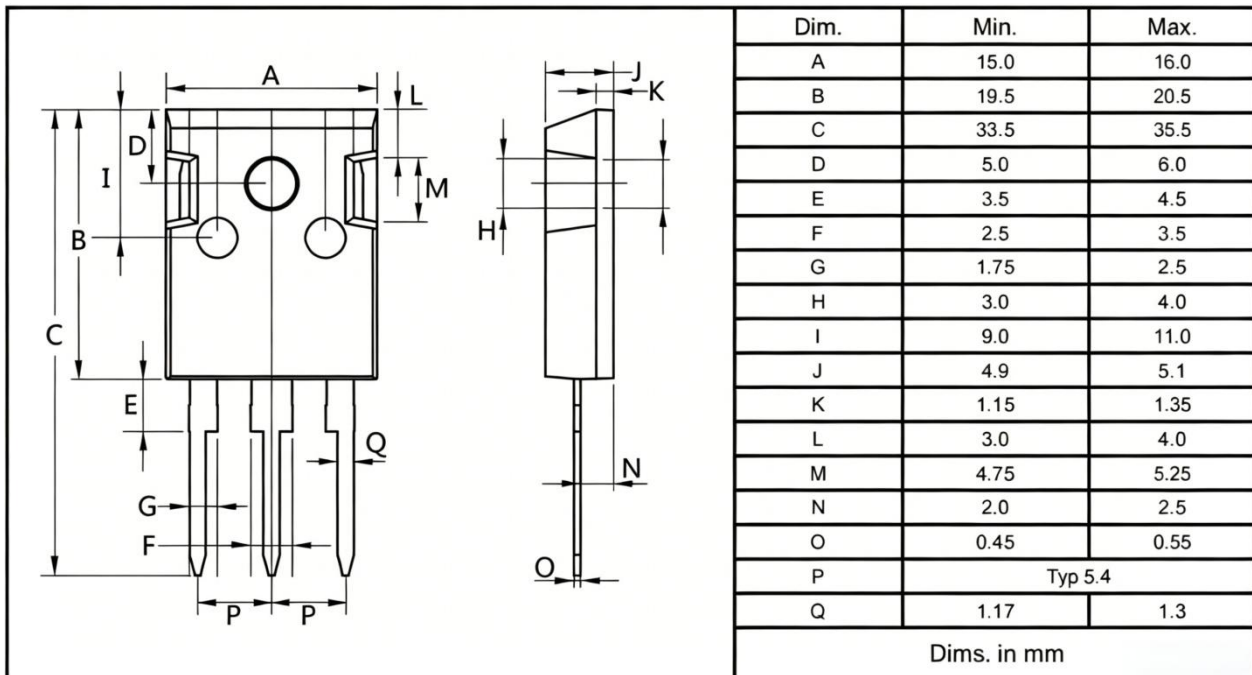


**Package Outlines**

**TO-247**



**TO-247S**



**\*Important Usage Information and Disclaimer**

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