



# DBD250G

## 25.0A Single-Phase Bridge Rectifier

ON Semiconductor®

<http://onsemi.com>

### Features

- Plastic molded structure
- Glass passivation for high reliability
- Peak reverse voltage :  $V_{RM}=600V$
- Average output current :  $I_O=25.0A$

### Specifications

#### Absolute Maximum Ratings at $T_c=25^\circ C$

Parameter	Symbol	Conditions	Rating	Unit
Peak Reverse Voltage	$V_{RM}$		600	V
Average Output Current	$I_O$	$T_a=40^\circ C$	6.0	A
		$T_a=40^\circ C$ , With $300 \times 300 \times 3.0 \text{mm}^3$ Cu fin	25.0	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	400	A
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-40 to +150	$^\circ C$
Dillective Strength Voltage	$V_{IS}$	Terminals to case, AC 1 minute	2	kV

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

#### Electrical Characteristics at $T_c=25^\circ C$ \*Per Constituent element of bridge.

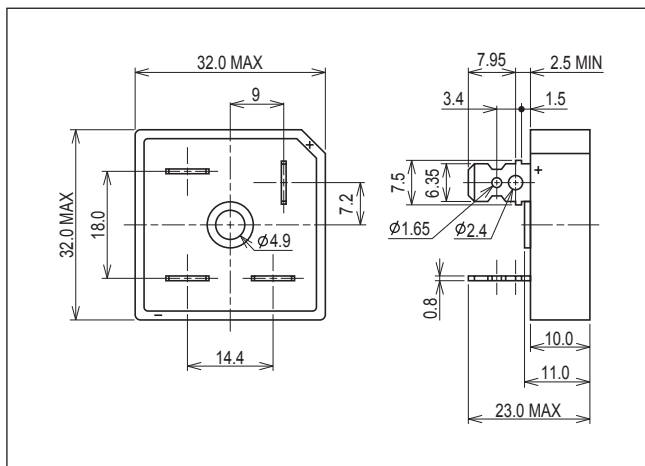
Parameter	Symbol	Conditions	Rating			Unit
			min	typ	max	
Forward Voltage	$V_F$	$I_F=12.5A^*$			1.05	V
Reverse Current	$I_R$	$V_R$ :At each $V_{RM}^*$			10	$\mu A$
Thermal Resistance	$R_{th(j-c)}$	Junction-Case			1.5	$^\circ C / W$

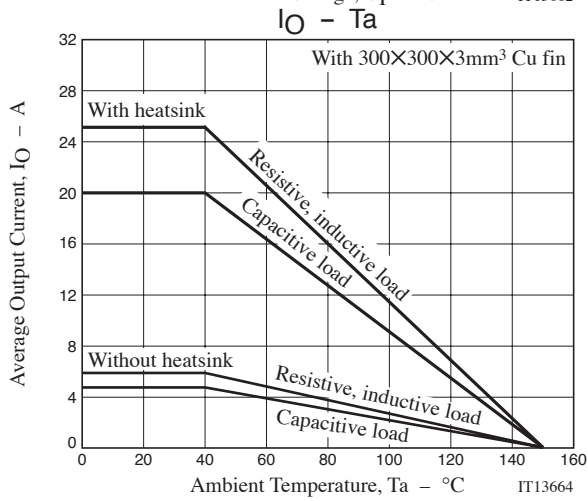
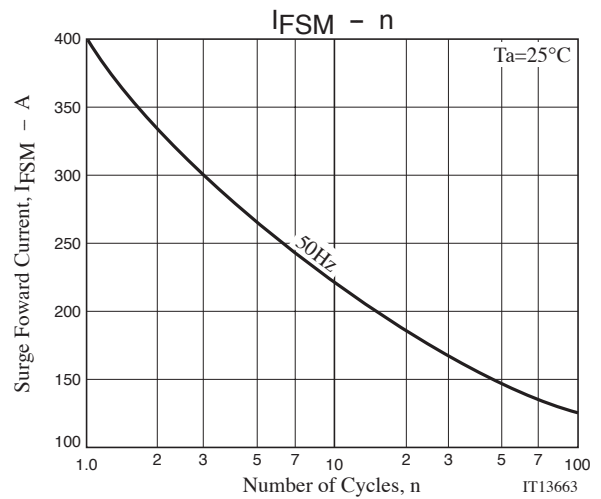
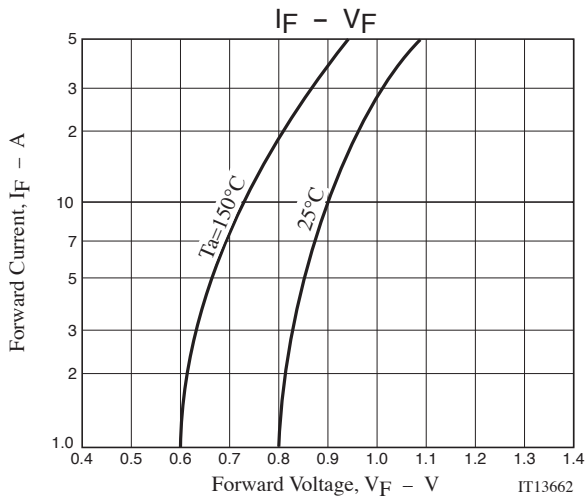
Note) Maximum tightening torque : 0.98Nm

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

### Package Dimensions

unit:mm(typ.)





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