

# MG038B150080A

## Bridge Diodes

800V, 150A

### Feature

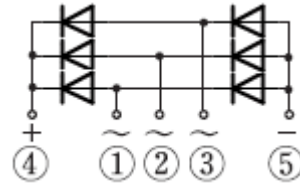
- High current capacity
- Thin PKG 17mm
- High heat dissipation
- UL E142422
- Halogen free
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): MG038



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-40 to 125	°C
Junction temperature	T <sub>j</sub>		150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		800	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, With heatsink, T <sub>c</sub> =125°C	150	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, per diode, T <sub>j</sub> =125°C	1650	A
Dielectric strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2.5	kV
Mounting torque	TOR	(M5)	2.8	N·m

※ :See the original Specifications

**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

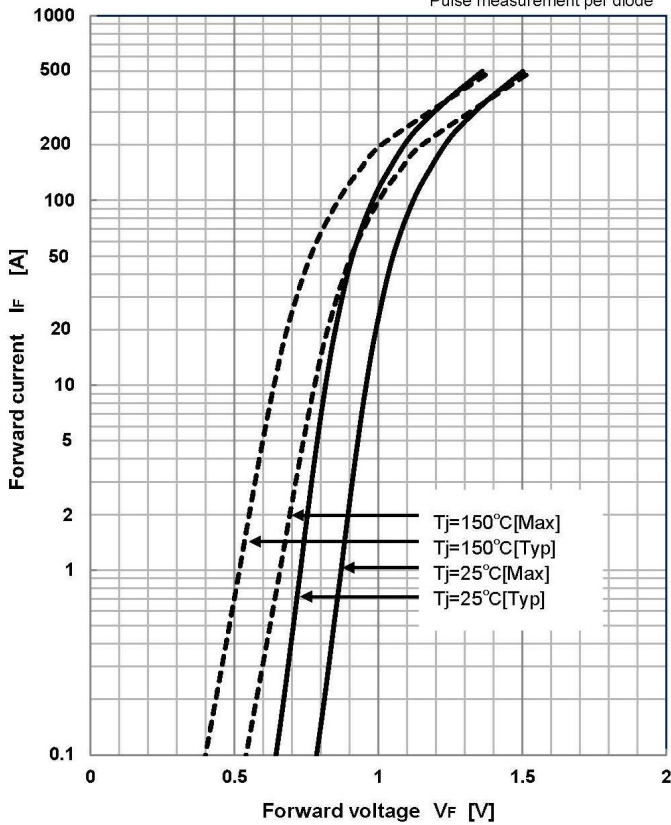
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	IF=50A, Pulse measurement, per diode			1.05	V
Reverse current	$I_R$	VR=800V, Pulse measurement, per diode			10	$\mu$ A
Thermal resistance	Rth(j-c)	Junction to case, With heatsink. Per module			0.06	°C/W

\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

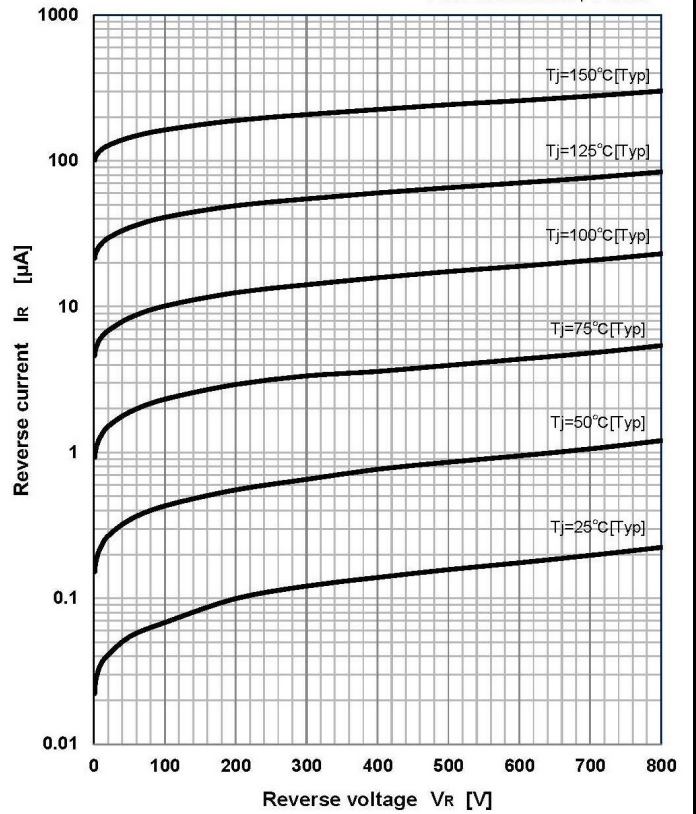
### Forward voltage

Pulse measurement per diode

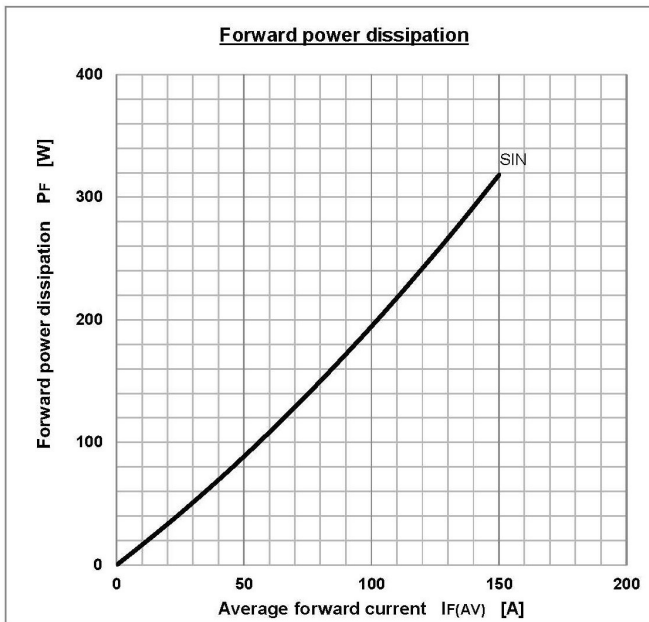


### Reverse current

Pulse measurement per diode

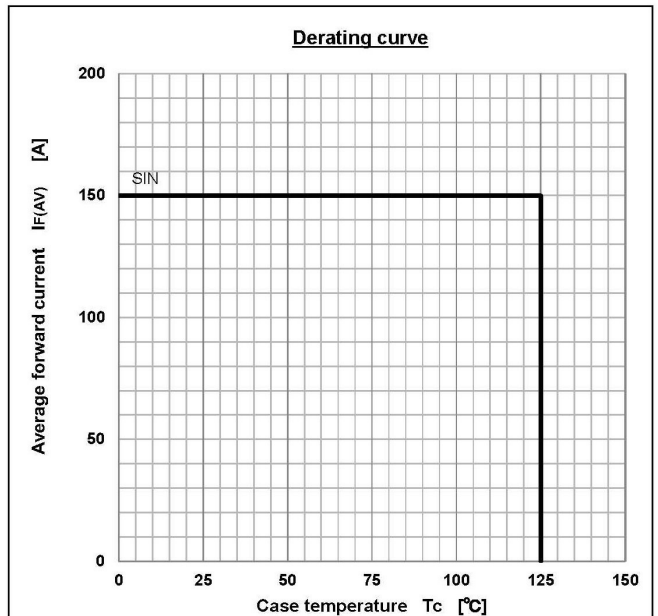


### Forward power dissipation



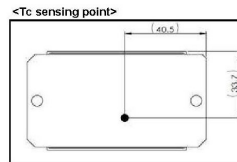
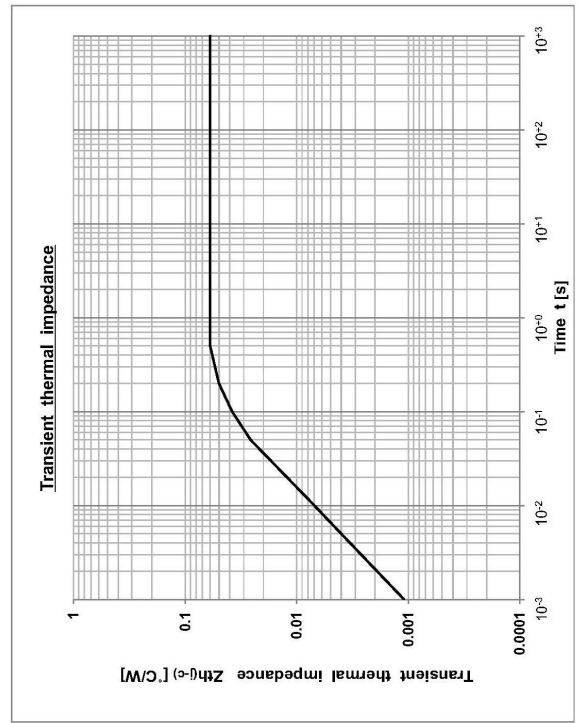
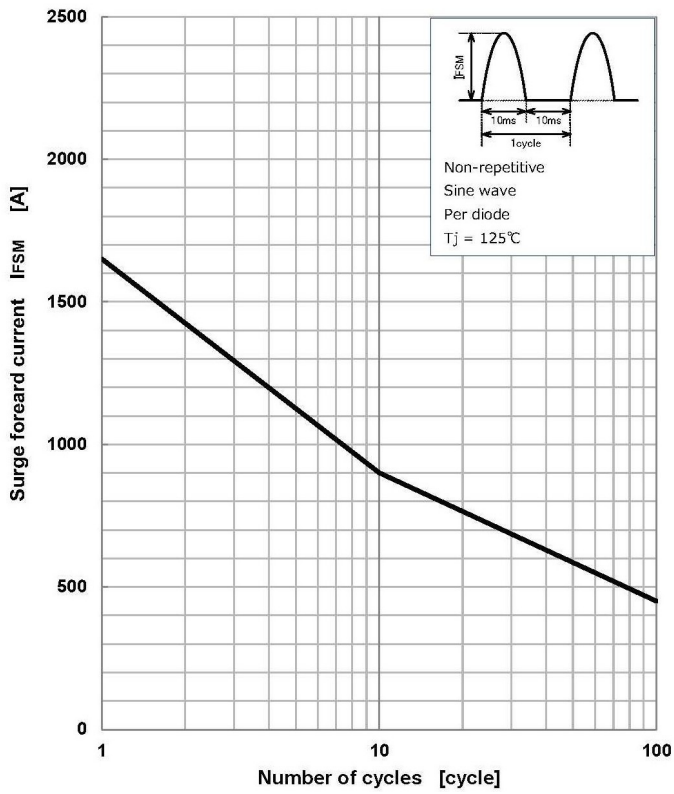
●  $T_j=150^\circ\text{C}$

### Derating curve



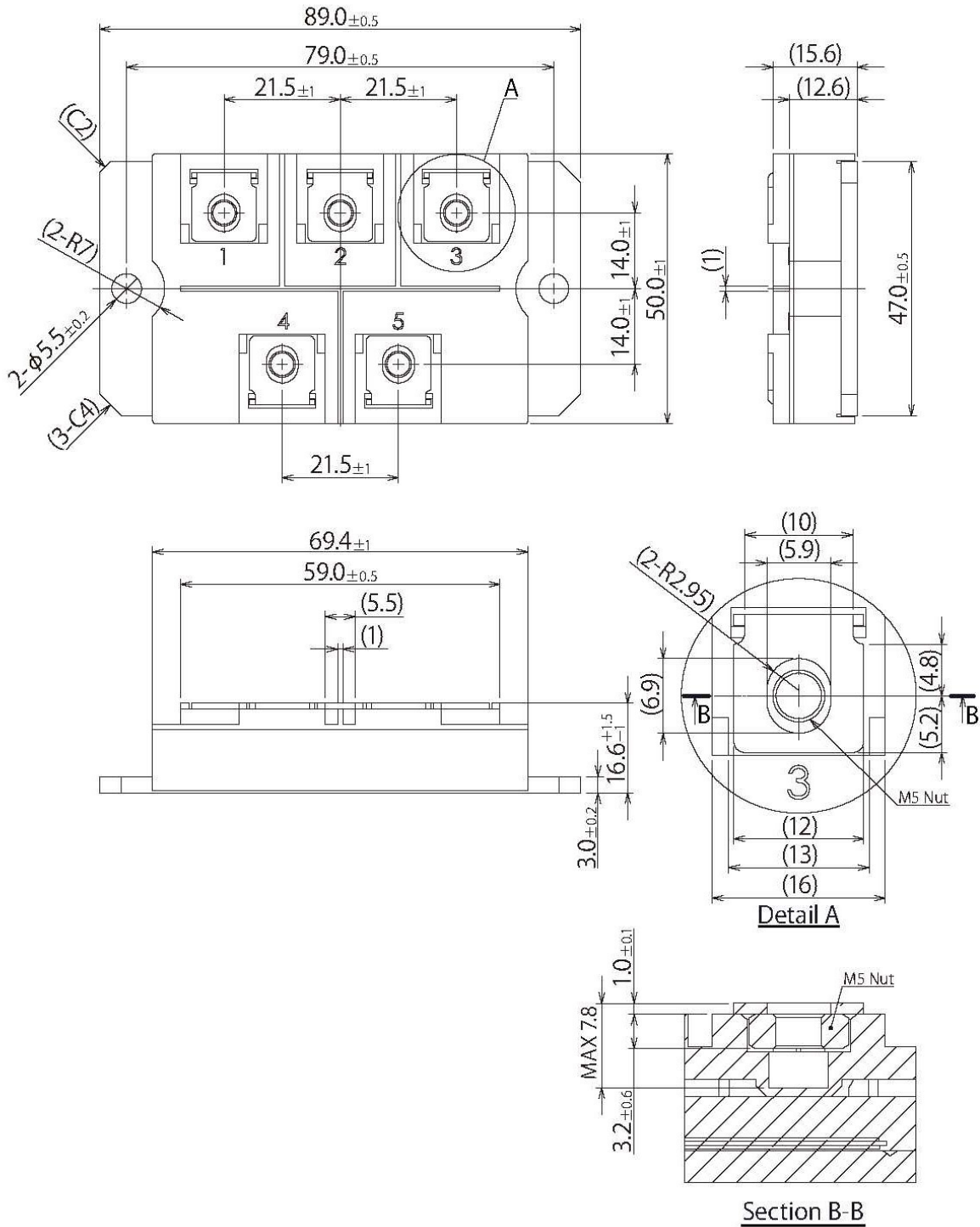
●  $V_R=800\text{V}$   
R-load  
With heatsink

**Surge forward current capability**



F7

JEDEC Code	-
JEITA Code	-
House Name	MG038



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