MMS40.08

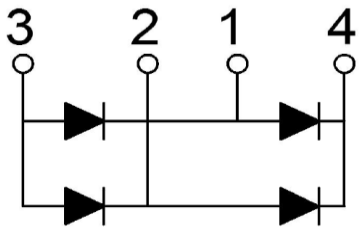
Power Rectifier bridge

Features:

- International standard package
- Aluminum oxide DBC
- Isolation voltage 3000V ~
- Glass passivated chip
- UL recognized, file no. E312789

Typical applications:

- DC power suppliers for apparatus device
- Input rectifying power supply for PWM converters
- Inverter welders
- Battery chargers



Symbol	Characteristcs	Test Conditions	Value			Unit
			Min	Typ	Max	
$V_{RSM/DSM}$	Non-repetitive reverse/forward blocking voltage	Tj = 25°C			800	V
$V_{RRM/DRM}$	Repetitive reverse/forward blocking voltage	Tj = 25°C			900	V
I_D	Rectifier bridge output current	Single-phase, Sin Full Wave, T_c = 105°C			40	A
I_{RRM}	Repetitive peak reverse current	$V_R = V_{RRM}$, Tj = 25°C			0.1	mA
		$V_R = V_{RRM}$, Tj = 150°C			5	mA
I_{FSM}	Forward surge current	t = 50Hz (10ms), Tj = 25°C, V_R = 0V			540	A
I^2t	I^2t for fusing coordination	t = 50Hz (10ms), Tj = 25°C			1458	A^2s
V_{FO}	Threshold voltage	Tj = 125°C			0.90	V
r_T	Forward slope resistance	Tj = 125°C			8	mΩ
V_{FM}	Peak forward voltage	Tj = 25°C ; I_F = 60A			1.45	V
$R_{th(j-c)}$	Thermal resistance junction to case	per module			0.40	°C/W
		per diode			1.60	°C/W
$R_{th(c-s)}$	Thermal resistance case to sink	per module			0.10	°C/W
V_{ISO}	Isolation voltage	50Hz, RMS, t = 1min			3000	V
F_M	Mounting torque - copper plate (M6)		0.8		1.5	N·m
	Mounting torque - terminal (M5)		0.8		1.5	N·m
T_{stg}	Storage Temperature		-40		125	°C
T_j	Operating Temperature		-40		150	°C
W_t	Weight			34		g
Outline	M58					

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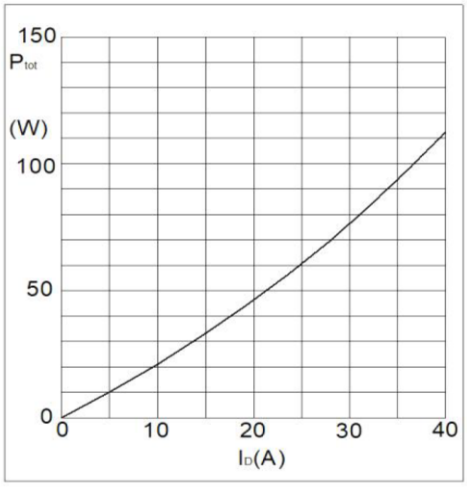


Fig1. Power Dissipation

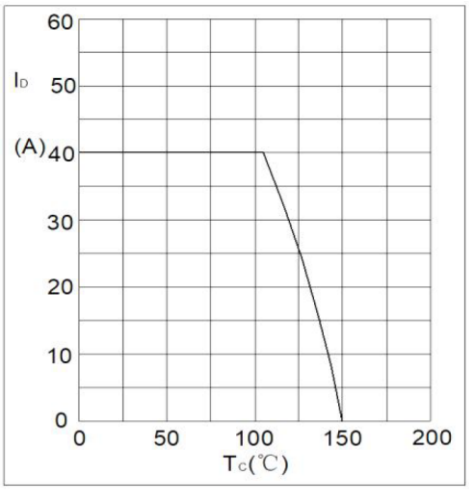


Fig2. Forward Current Derating Curve

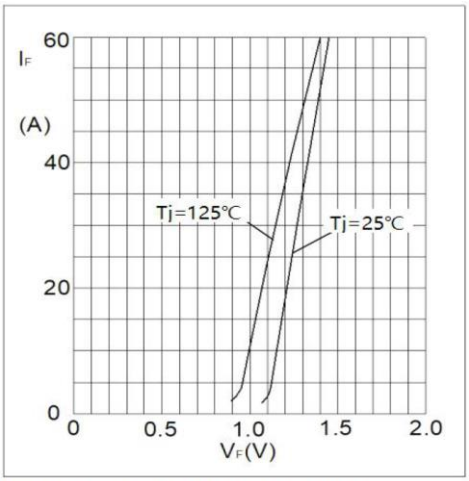


Fig3. Forward Characteristics

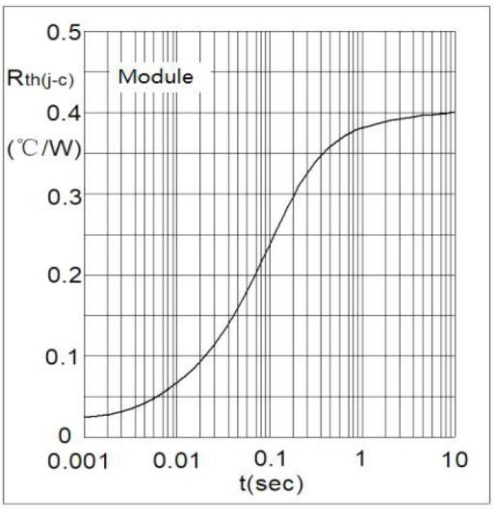


Fig4. Transient Thermal impedance

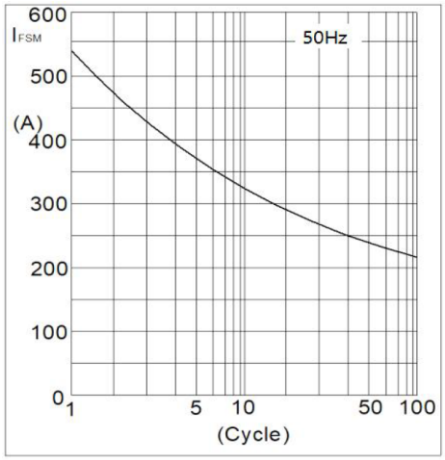
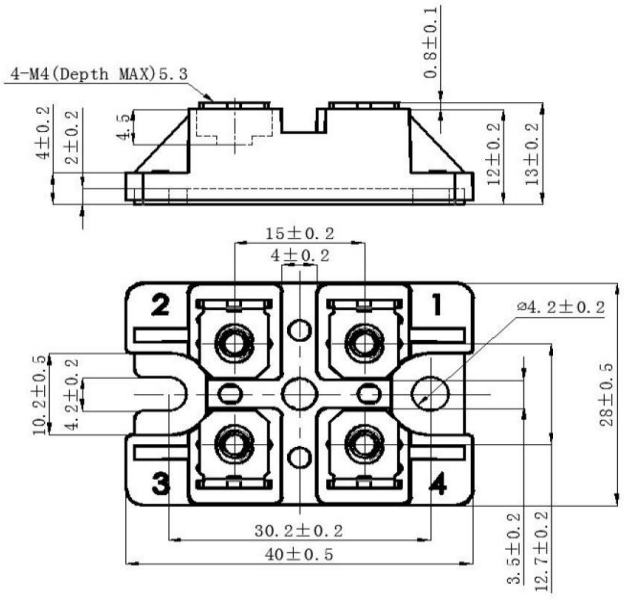


Fig5. Max Non-Repetitive Forward Surge Current



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