

MTS60.16

Power Rectifier bridge

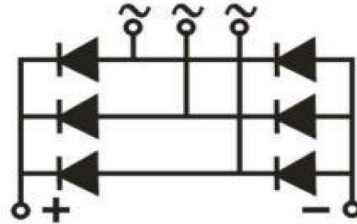
Features:

- International standard package
- Low forward voltage drop
- Isolation voltage 2500V ~
- Simple mounting
- 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	Characteristics	Test Conditions	Value			Unit
			Min	Typ	Max	
$V_{RSM/DSM}$	Non-repetitive reverse/forward blocking voltage	$T_j = 25^\circ\text{C}$			1700	V
$V_{RRM/DRM}$	Repetitive reverse/forward blocking voltage	$T_j = 25^\circ\text{C}$			1600	V
I_D	Rectifier bridge output current	Three-phase, Full Wave, $T_c = 120^\circ\text{C}$ (108°C)			60 (75)	A
I_{RRM}	Repetitive peak reverse current	at V_{RRM} $T_j = 150^\circ\text{C}$			5	mA
I_{FSM}	Forward surge current	10ms half sine wave, $T_j = 25^\circ\text{C}$, $V_R = 0$			800	A
$I^2 t$	$I^2 t$ for fusing coordination	10ms half sine wave, $T_j = 25^\circ\text{C}$			3200	A ² s
V_{FO}	Threshold voltage	$T_j = 125^\circ\text{C}$			0.85	V
r_T	Forward slope resistance	$T_j = 125^\circ\text{C}$			7.40	mΩ
V_{FM}	Peak forward voltage	$T_j = 25^\circ\text{C}$; $I_F = 75\text{A}$			1.45	V
$R_{th(j-c)}$	Thermal resistance junction to case	per module			0.20	°C/W
$R_{th(c-s)}$	Thermal resistance case to sink	per module			0.08	°C/W
V_{ISO}	Isolation voltage	50Hz, RMS, $t = 1\text{min}$			3000	V
F_M	Mounting torque - copper plate (M5)		2.5		3.5	N·m
	Mounting torque - terminal (M4)		1.5		2.5	N·m
	Mounting torque - terminal (M5)		2.5		3.5	N·m
T_{stg}	Storage Temperature		-40		125	°C
T_j	Operating Temperature		-40		150	°C
W_t	Weight			120		g
Outline	M04CC					

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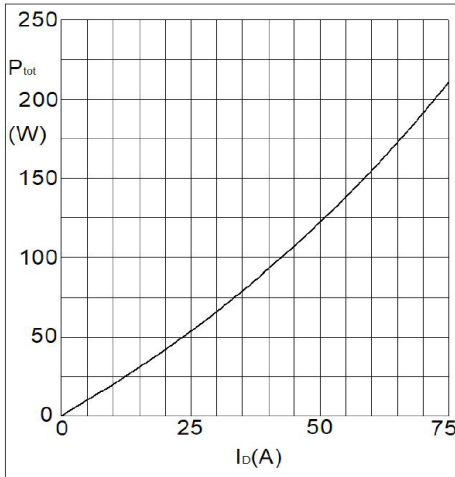


Fig1. Power Dissipation

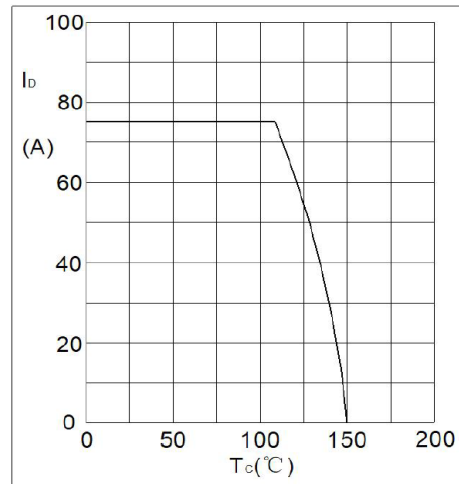


Fig2. Forward Current Derating Curve

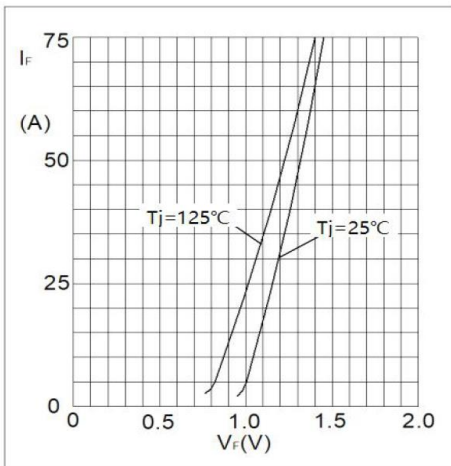


Fig3. Forward Characteristics

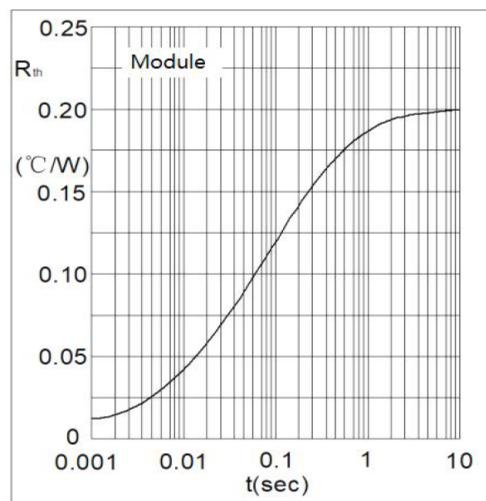


Fig4. Transient Thermal impedance

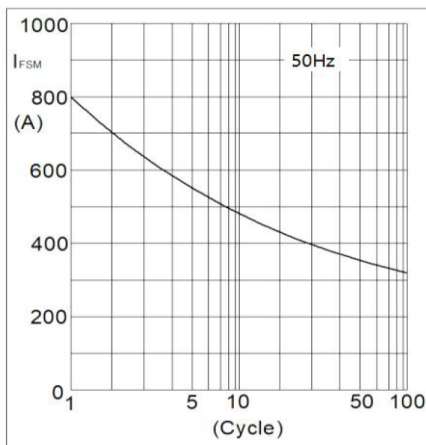
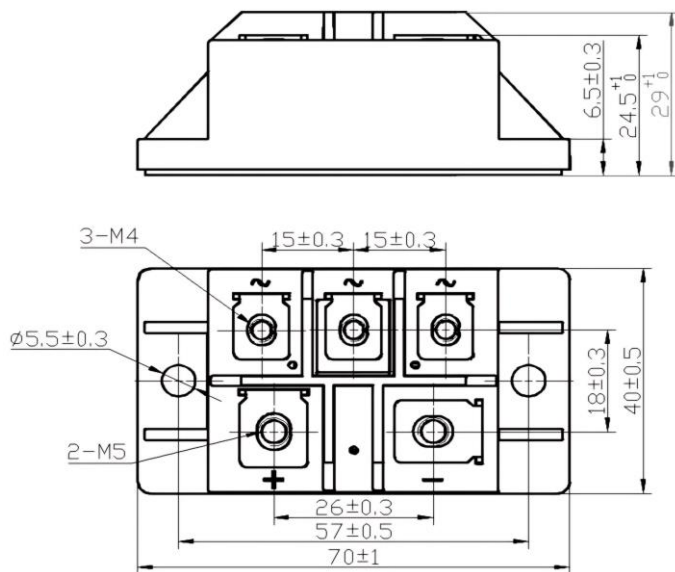


Fig5. Max Non-Repetitive Forward Surge Current



(dimensions in mm)

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