

MMS40.10BY

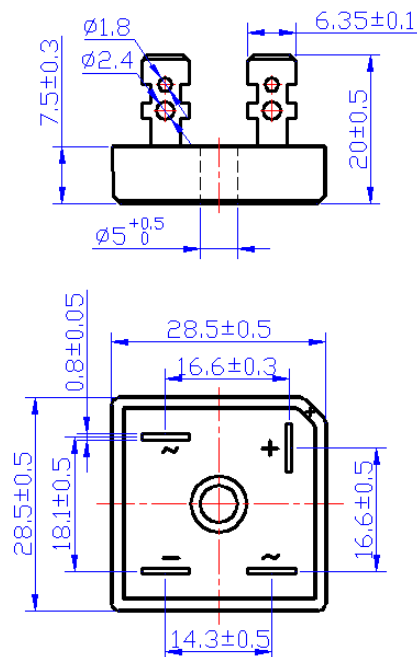
1PH POWER RECTIFIER BRIDGE 40A 1000V

Feature

- Glass passivated chip ensure high reliability
- Low forward voltage drop
- Isolation voltage 2500V ~
- Small volume, light weight
- Low thermal resistance, high heat-conductivity, low temperature rise

Application

- Power supply for DC power device
- Input rectifier for PWM convertor
- Inverter welding machine



■ Maximum value

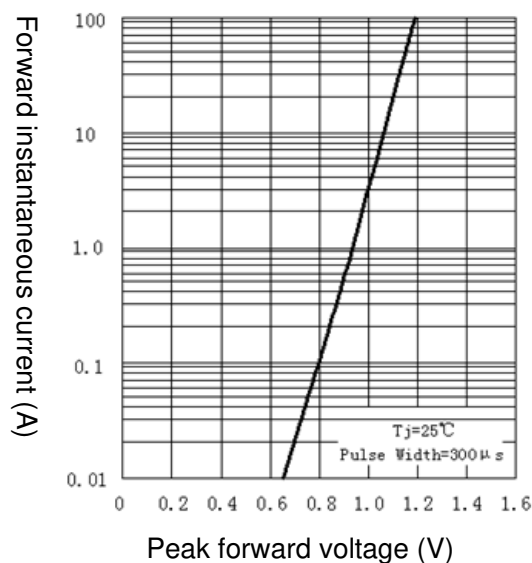
Symbol	Parameter	MMS40.10BY	Unit
V_{RRM}	Reverse peak repetitive voltage	1000	V
V_{RSM}	Reverse peak non-repetitive voltage	1100	V

Symbol	Parameter	Test condition	Rating	Unit
$I_F (AV)$	Forward average current	$T_C=55^{\circ}C$	50	A
I_{FSM}	Forward surge current	50Hz, sin, $t=10ms$, $T_{jm}=25^{\circ}C$	450	A
I^2t	I^2t value		1012	A^2S
V_{ISO}	Isolation voltage	50Hz, R.M.S, $t=1min$, $I_{iso}:1mA(max)$	2500	V
T_j	Operating junction temperature		-40 to +150	$^{\circ}C$
T_{jm}	Rated junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-40 to +125	$^{\circ}C$
M_d	Mounting torque M5		2	N·m
W_t	Weight		14	g

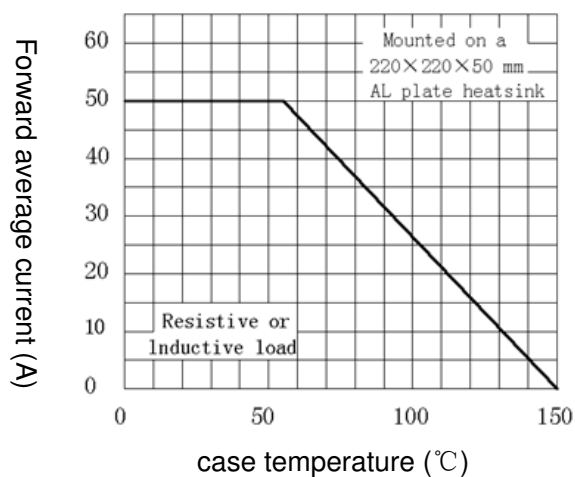
■ Electrical characteristics

Symbol	Parameter	Test condition	Max value	Unit
I_{RRM}	Peak reverse repetitive current	$V_R=V_{RRM}$, $T_j=25^{\circ}C$	5	μA
		$V_R=V_{RRM}$, $T_j=150^{\circ}C$	3	mA
V_{FM}	Peak forward voltage	$I_{FM}=25A$, $T_j=25^{\circ}C$	1.1	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-sided heat dissipation, sine half-wave	1.4	$^{\circ}C/W$

Forward characteristics curve



Case temperature vs forward average current



Forward surge current vs cycles

