TECHSEM

MDQ100

Single Phases Rectification Bridge Modules

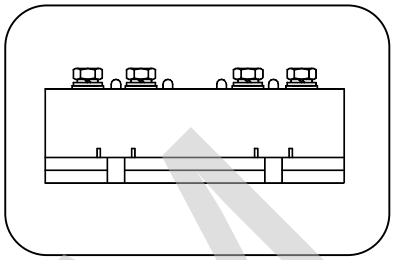
Features:

- Isolated mounting base 2500V
- Solder joint technology
- Space and weight savings

Typical Applications

- DC Power supplies for equipments.
- DC supply for PWM inverter
- Inverter Welder

I_O	**100A**
V_{RRM}	**600~1600V**
I_{FSM}	**$1.5A \times 10^3$**
I^2t	**$11.4A^2 S*10^3$**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min	Type	Max	
I_O	DC output current	Single-phase full wave rectifying circuit, T_C=100°C	150			100	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RSM}= V_{RRM}+200V	150	600		1600	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			10	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			1.50	KA
I^2t	I^2T for fusing coordination					11.4	A^2s*10^3
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slop resistance					4.5	mΩ
V_{FM}	Peak forward voltage	I_{FM}=150A	25			1.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.14	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(max)		2500			V
F_m	Terminal connection torque(M6)				6		N·m
	Mounting torque(M5)				4		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				420		g
Outline	411F4/419F4/221F4						

TECHSEM

Peak forward Voltage Vs.Peak forward Current

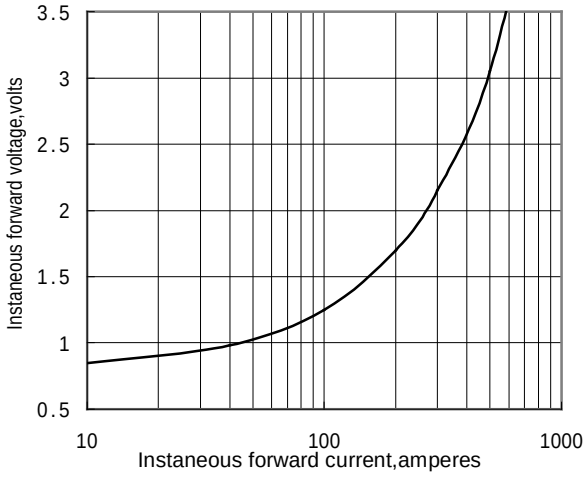


Fig.1

Max. junction To case Thermai Impedance Vs.Time

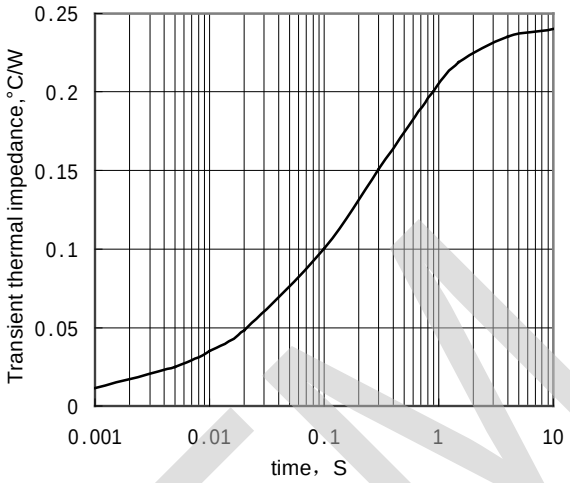


Fig.2

Max. Power Dissipation Vs.Mean forward Current

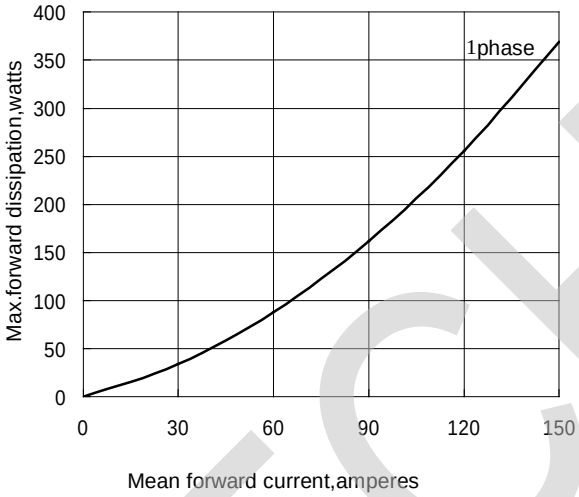


Fig.3

Max. case Temperature Vs.Mean forward Current

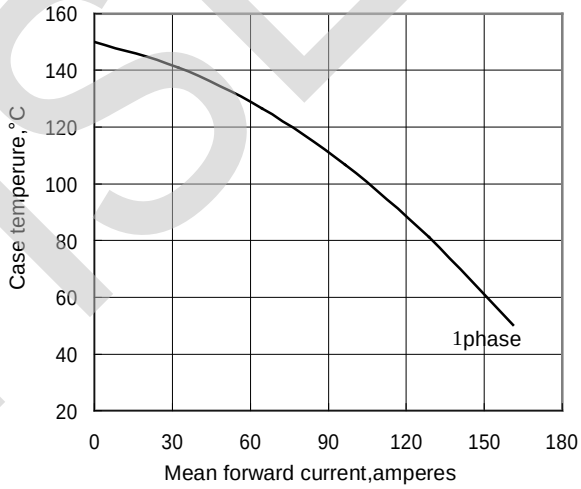


Fig.4

1.5

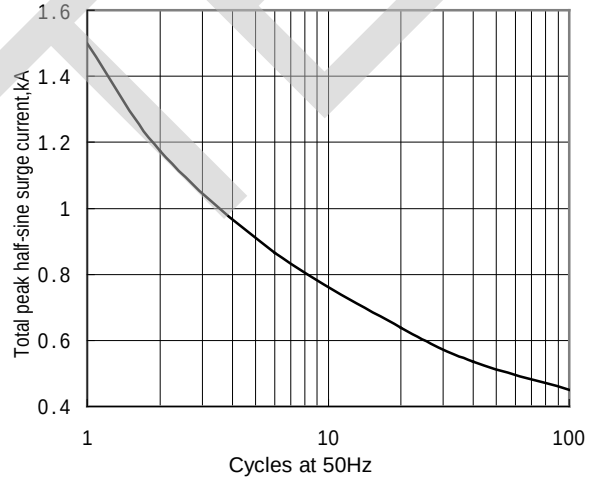


Fig.5

I^2t Vs.Time

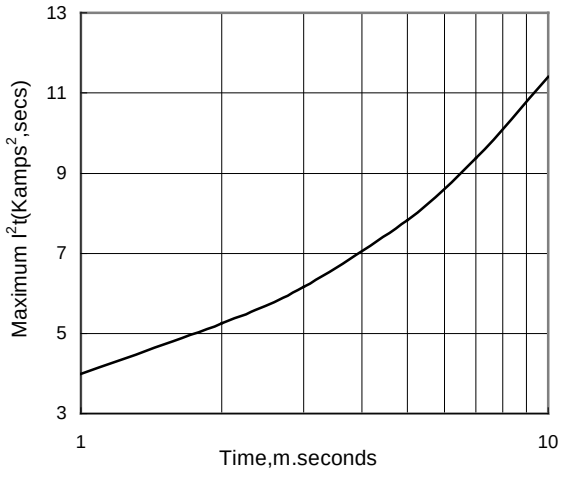
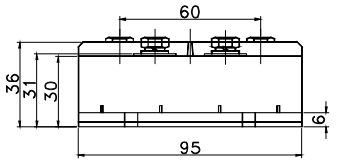
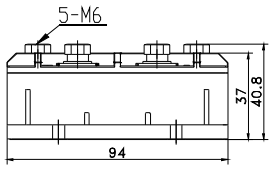
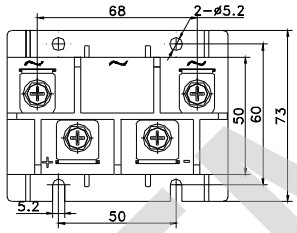


Fig.6

Outline:

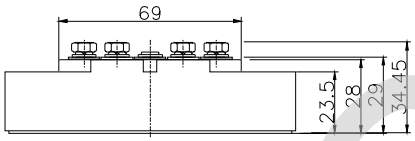


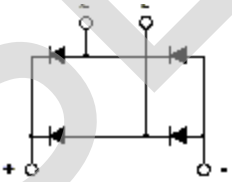


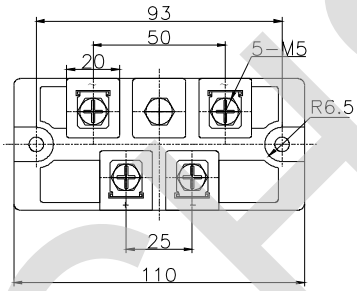


411F4

419F4







221F4

TECHSEM