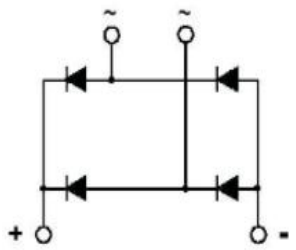
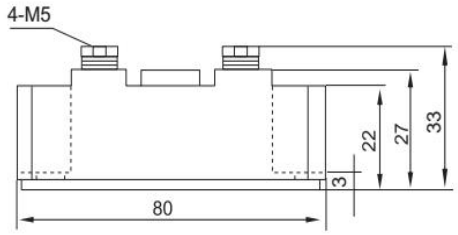
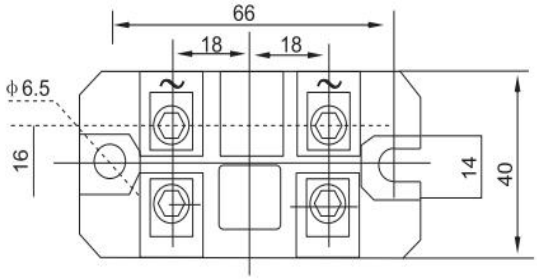
MDQ100A

Single phase rectifier bridge module



Outside Dimension





MDQ100A

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_{DRM}&V_{RRM}+200V	150	600		1800	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			1.475	V
$R_{th(j-c)}$	Thermal resistance Junction to heatsink	Single side cooled				0.240	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(max)		2500			V
F_m	Terminal connection torque(M5)				2.0		N.m
	Mounting torque(M6)				3.0		N.m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				154		g
Outline							

OUTLINE DRAWING & CIRCUIT DIAGRAM

MDQ100A

Rating and Characteristic

Peak forward Voltage Vs.Peak forward Current

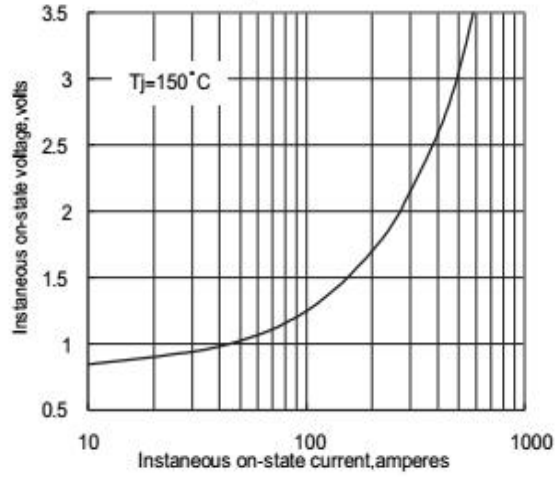


Fig.1

Max. junction To case Thermal Impedance Vs.Time

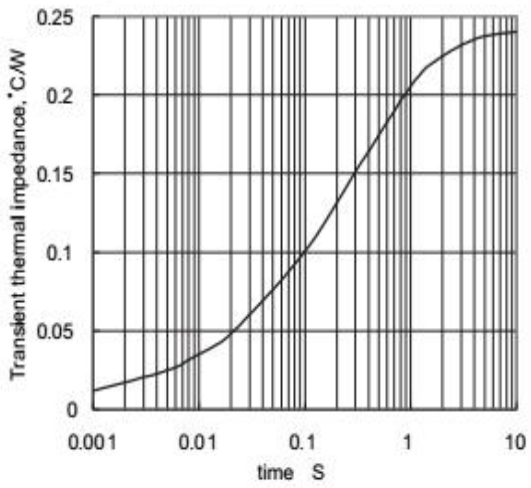


Fig.2

Max. Power Dissipation Vs.Mean forward Current

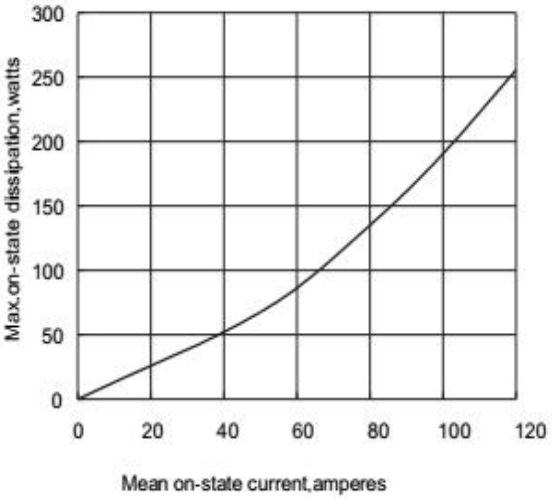


Fig.3

Max. case Temperature Vs.Mean forward Current

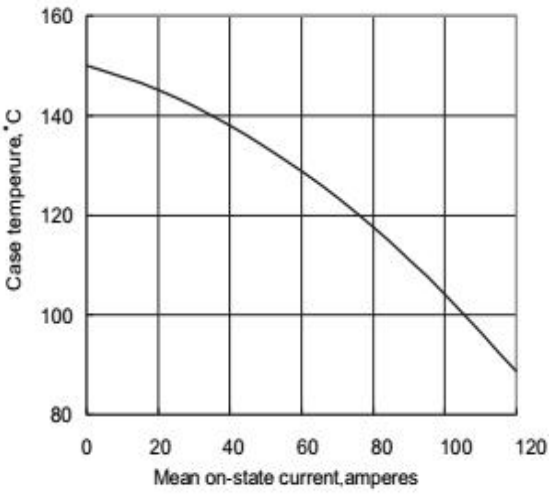


Fig.4

Surge Current Vs.Cycles

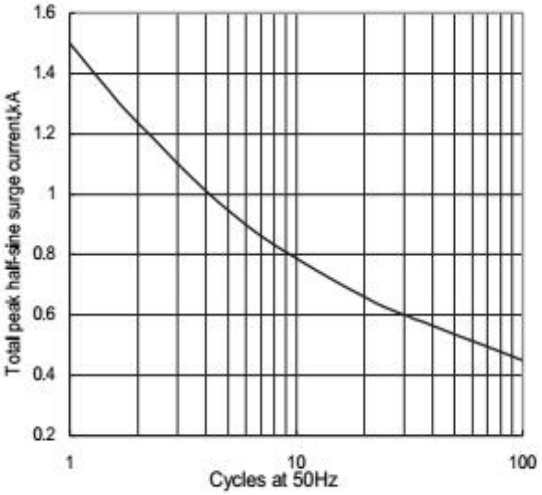


Fig.5

I^2t Vs.Time

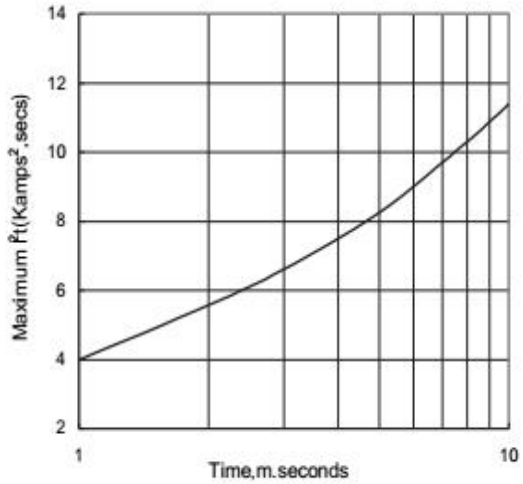


Fig.6