

**FEATURES**

- Isolated mounting base 2500V-
- Pressure contact technology with Increased power cycling capability
- Space and weight savings
- Welding

**TYPICAL APPLICATIONS**

- Inverter
- Inductive heating
- Chopper

**TECHNICAL DATA**

DEVICE TYPE	V <sub>RRM</sub> (V)	V <sub>RSM</sub> (V)
MDS100/04	400	500
MDS100/16	1600	1700



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>O</sub>	DC output current	Three-phase full wave rectifying circuit, T <sub>C</sub> =100°C	150			100	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>RRM</sub> +200V	150	600		1600	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			8	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	150			1.2	KA
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				7.2	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			0.8	V
r <sub>F</sub>	Forward slop resistance					4.5	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =100A	25			1.3	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled				0.2	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled				0.07	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> :1mA(max)		2500			V
F <sub>m</sub>	Terminal connection torque(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				200		g
Outline	IR- 5						

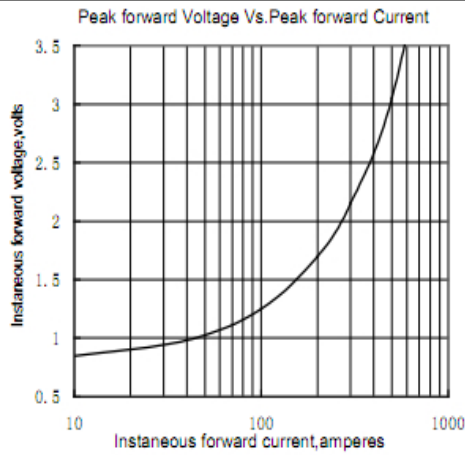


Fig.1

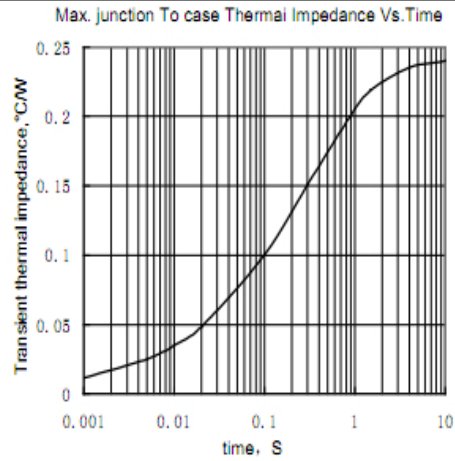


Fig.2

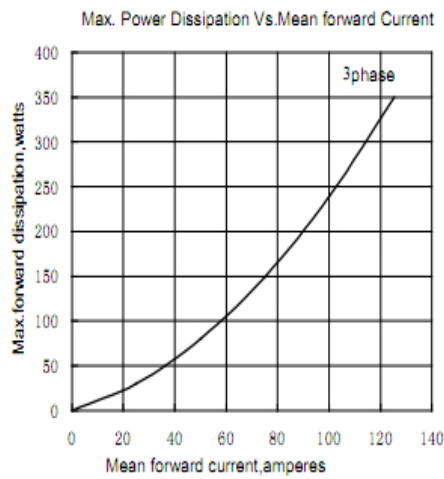


Fig.3

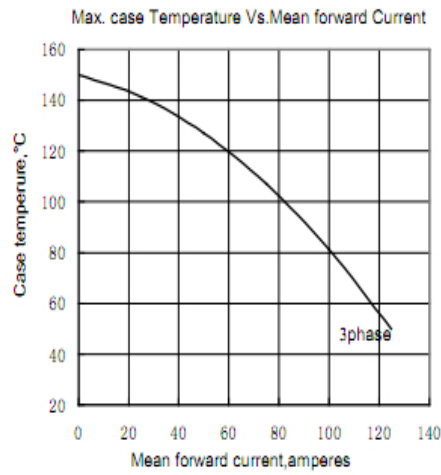


Fig.4

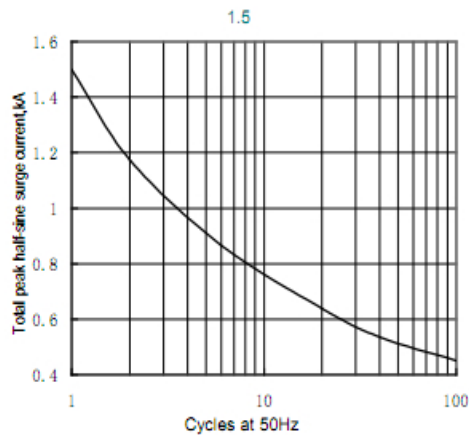


Fig.5

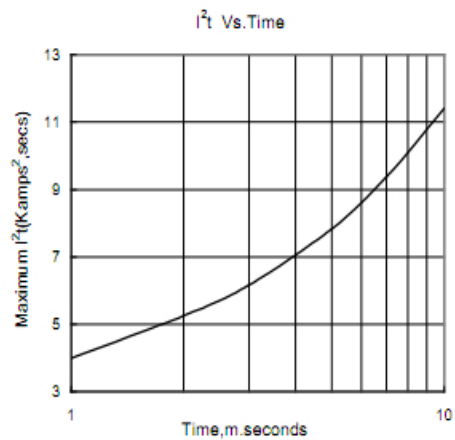
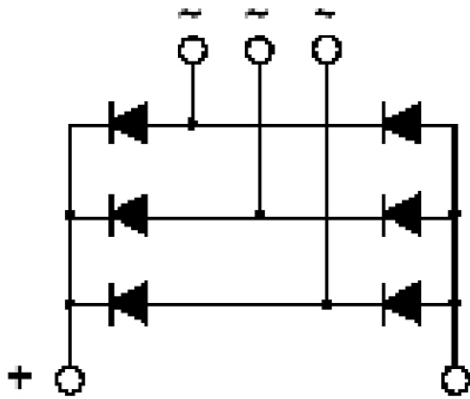
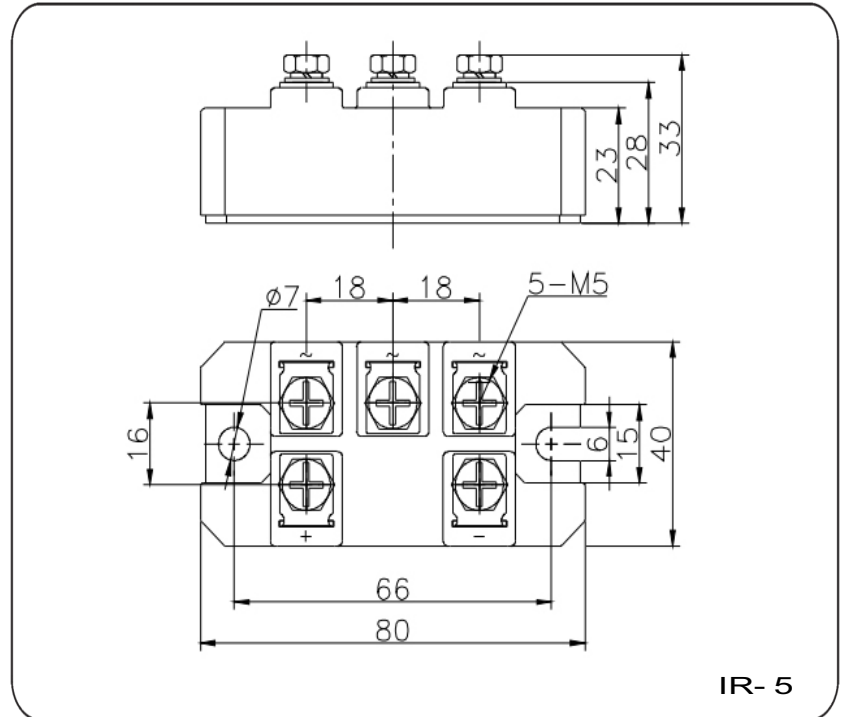


Fig.6

CIRCUIT DIAGRAM



PACKAGE OUTLINE



All dimensions are in mm.

**Insel Rectifiers (India) Pvt. Ltd.**

(An ISO 9001:2015, ISO 14001:2015 Certified Company)

Plot No 151, Udyog Kendra, Extn.-II, Ecotech-III, Greater Noida-201306

Toll Free No.: 1800 3070 9989, Fax : 011-27491404

E-mail : [insel@rectifierindia.com](mailto:insel@rectifierindia.com), [sales@rectifierindia.com](mailto:sales@rectifierindia.com)