

**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**

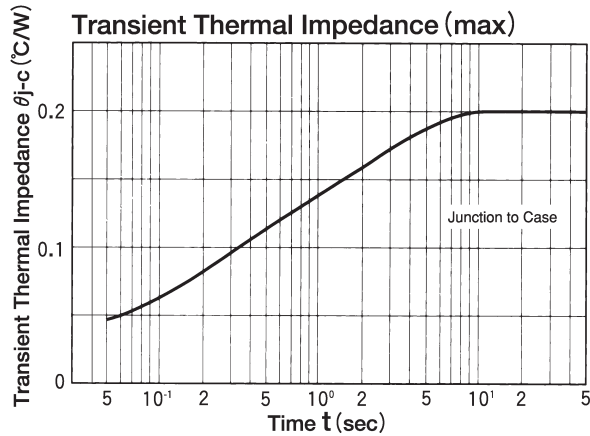
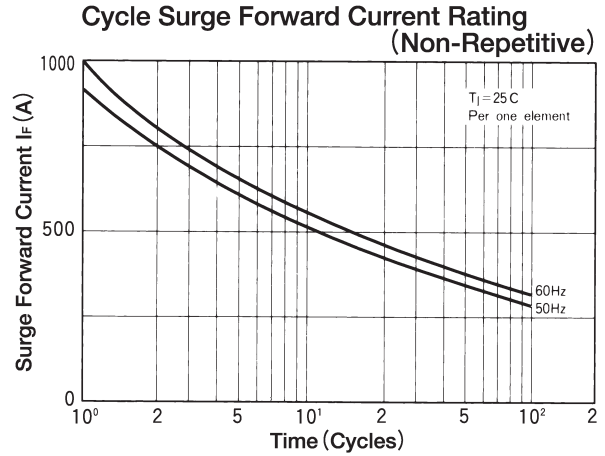
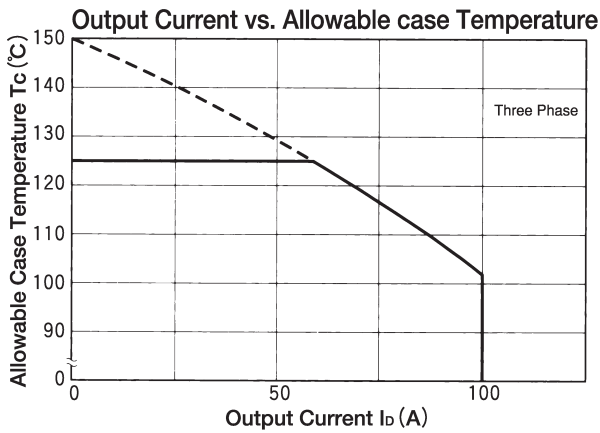
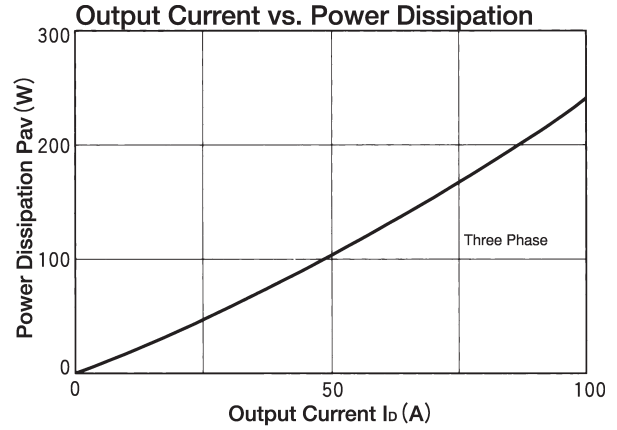
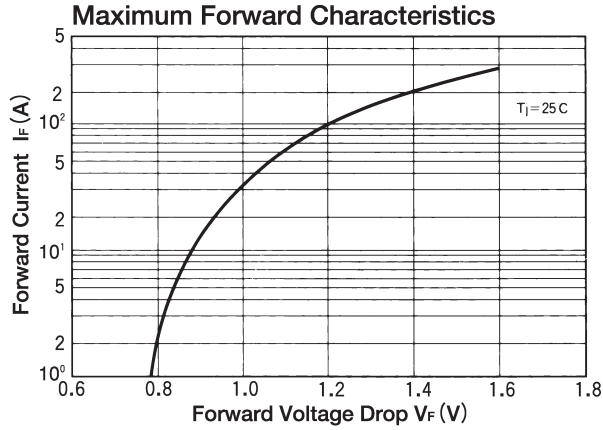
DEVICE TYPE	$V_{RRM}$ (V)	$V_{RSM}$ (V)
<b>MDS100(S)/12</b>	<b>1200</b>	<b>1300</b>
<b>MDS100(S)/16</b>	<b>1600</b>	<b>1700</b>



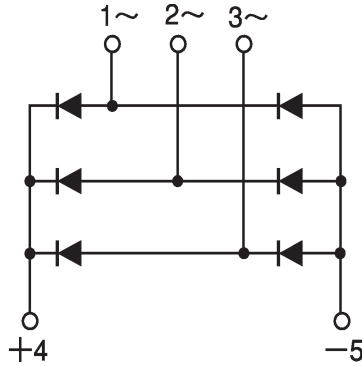
Symbol	Item	Conditions	Ratings	Unit
$I_D$	Output Current (D.C.)	Three phase full wave. $T_c : 102^\circ\text{C}$	100	A
$I_{FSM}$	Surge Forward Current	1cycle, 50/60Hz, peak value, non-repetitive	910/1000	A
$I^2t$	$I^2t$	Value for one cycle of surge current	4100	A <sup>2</sup> S
$T_j$	Operating Junction Temperature		-40~+150	°C
$T_{stg}$	Storage Temperature		-40~+125	°C
$V_{iso}$	Isolation Breakdown Voltage (R.M.S.)	A.C. 1 minute	2500	V
Mounting Torque	Mounting (M5)	Recommended Value 1.5~2.5 (15~25)	2.7 (28)	N·m (kgf·cm)
	Terminal (M5)	Recommended Value 1.5~2.5 (15~25)	2.7 (28)	
Mass		Typical Value	160	g

**Electrical Characteristics**

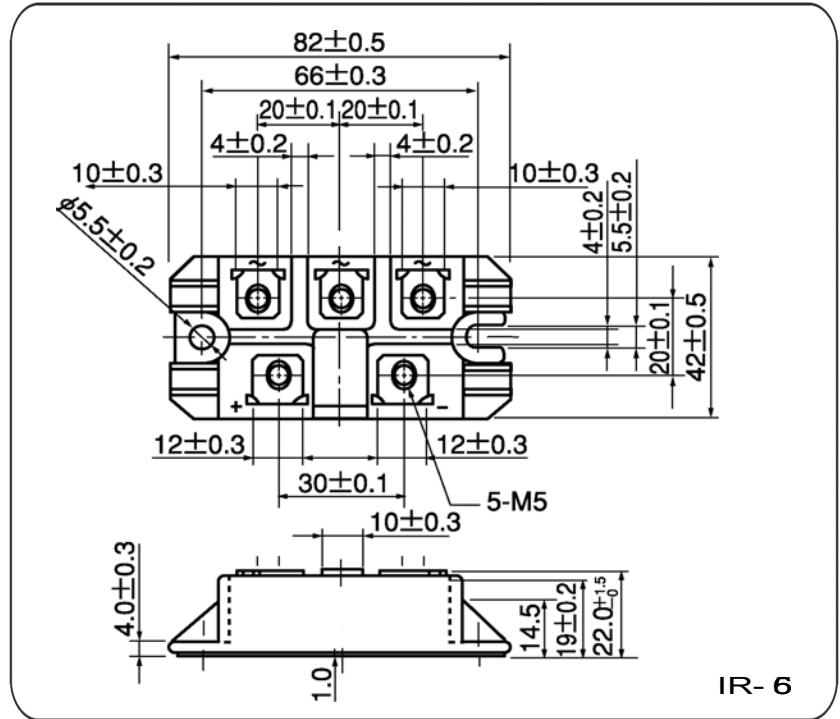
Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
$I_{RRM}$	Repetitive Peak Reverse Current	$T_j=150^\circ\text{C}$ at $V_{RRM}$			15	mA
$V_{FM}$	Forward Voltage Drop	$T_j=25^\circ\text{C}$ , $I_{FM}=100\text{A}$ , Inst. measurement			1.2	V
$R_{th(j-c)}$	Thermal Impedance	Junction to case			0.2	°C/W



CIRCUIT DIAGRAM



PACKAGE OUTLINE



All dimensions are in mm.

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

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

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