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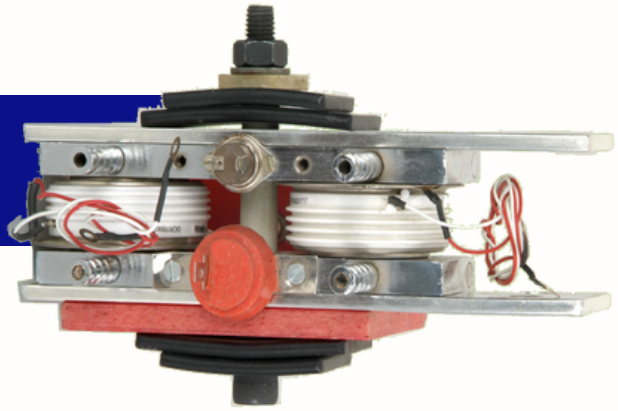
AC SWITCH
(WATER COOLED)
2XDCR1004SD



FEATURES

- **Non-Isolated water cooled blocks**
- **Provided with thermostat & M.O.V.**
- **Two thyristors connected in anti-parallel configuration**

TYPICAL APPLICATIONS

- **Resistance welding equipment**
- **Electroplating equipment**
- **Induction heating equipment**

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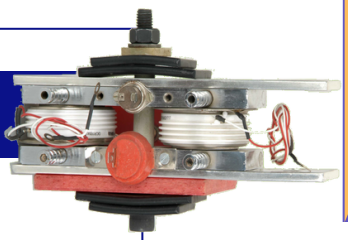

TECHNICAL DATA

DEVICE TYPE	V_{DRM} / V_{RRM} (V)	V_{RSM} (V)
2XDCR1004SD1515	1500	1600
2XDCR1004SD1717	1700	1800

SYMBOL	CONDITIONS	VALUES
I_{RMS}	50 Hz, water flow -4L/min, Water temp = 60^0C	2374 amp.
V_{TM}	Maximum peak forward Voltage drop @ 1000AP	1.625 V
I_{TSM}	Maximum peak one cycle (non-rep.) surge current 10 msec	21.0 KA
I^2t	Max. I^2t rating (non-rep.) for 10 msec	2210 x 10^3 A^2s
I_{RRM}/I_{DRM}	Peak reverse current at T_{vj} = 125^0C	50 mA
I_{GT} V_{GT} di/dt dv/dt		200 mA 3.5 V 500 A/us 1000 V/us
V_0 R_0	Tvj=max Tvj=max	0.86V 0.25 mΩ
$R_{th(w)}$ Tvj Tstg	 Junction temperature Storage temperature	0.12°C/W 125 °C 125 °C
Mounting force		20 KN
Weight	Approx.	4.5 Kg
Package Outline		IR-39

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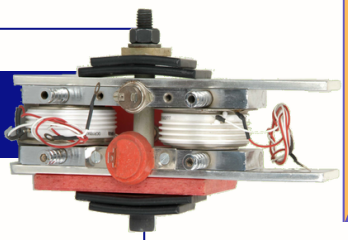

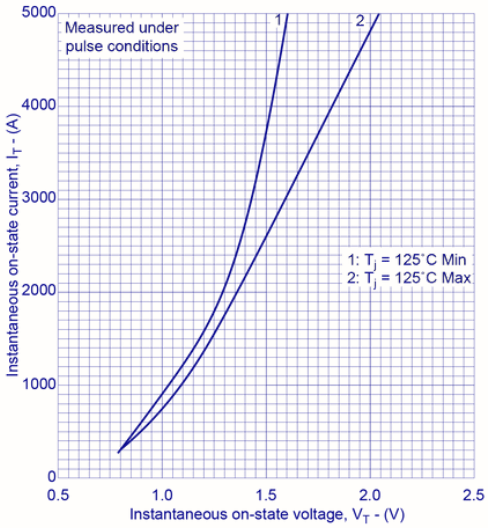

FIG. **1** **maximum (limit) on-state characteristics**

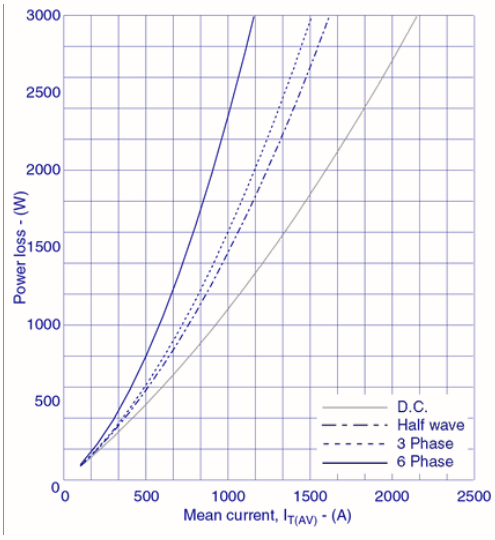

FIG. **2** **dissipation curves**

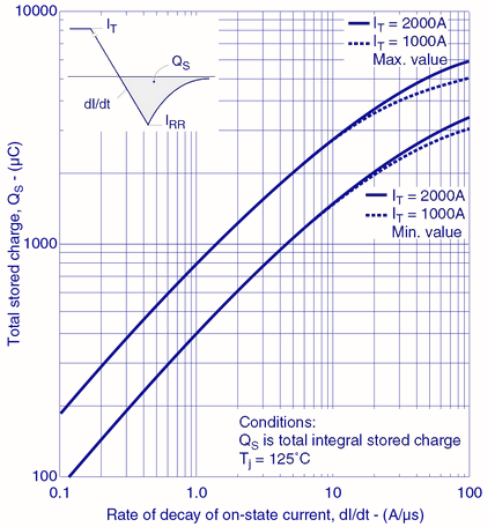

FIG. **3** **stored charge**

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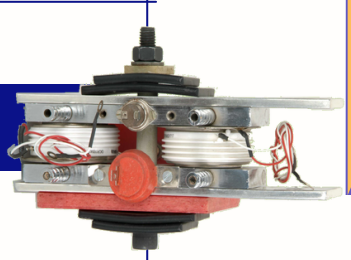

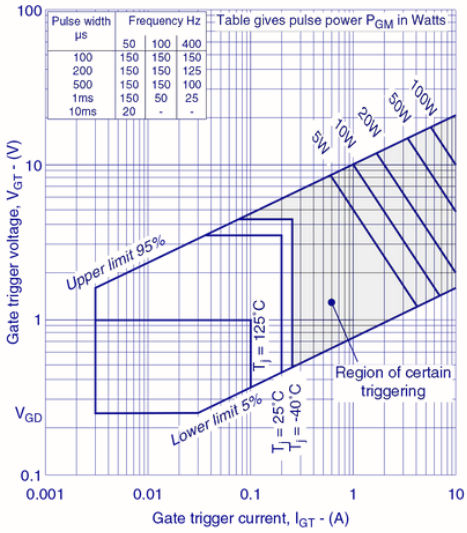

FIG. **4** gate characteristics

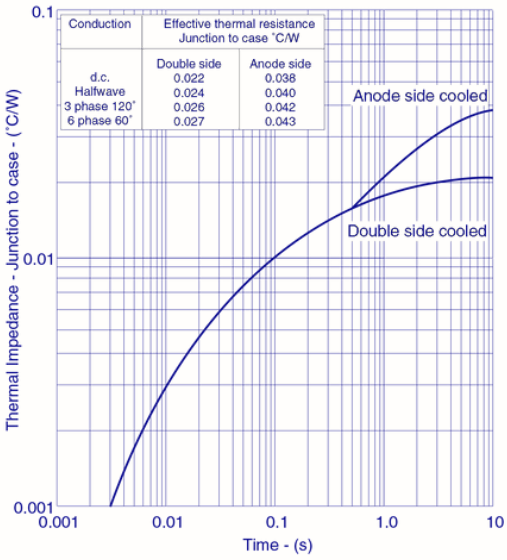

FIG. **5** transient thermal impedance-junction to case

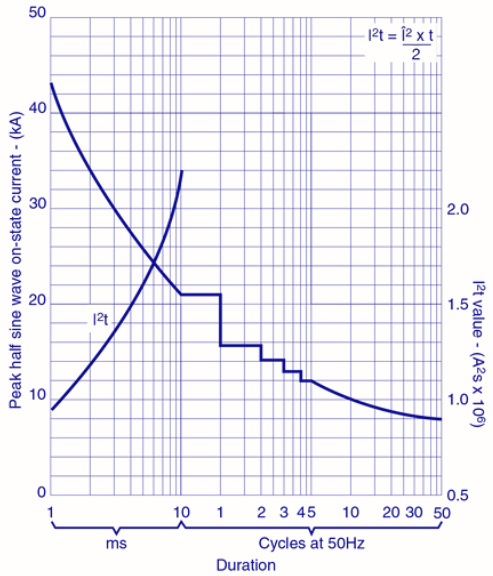

FIG. **6** surge (non-repetitive) on-state current vs time (with 50% V_{RRM} at T_{case} = 125°C)

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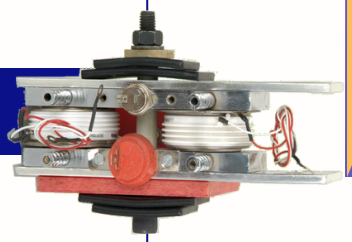
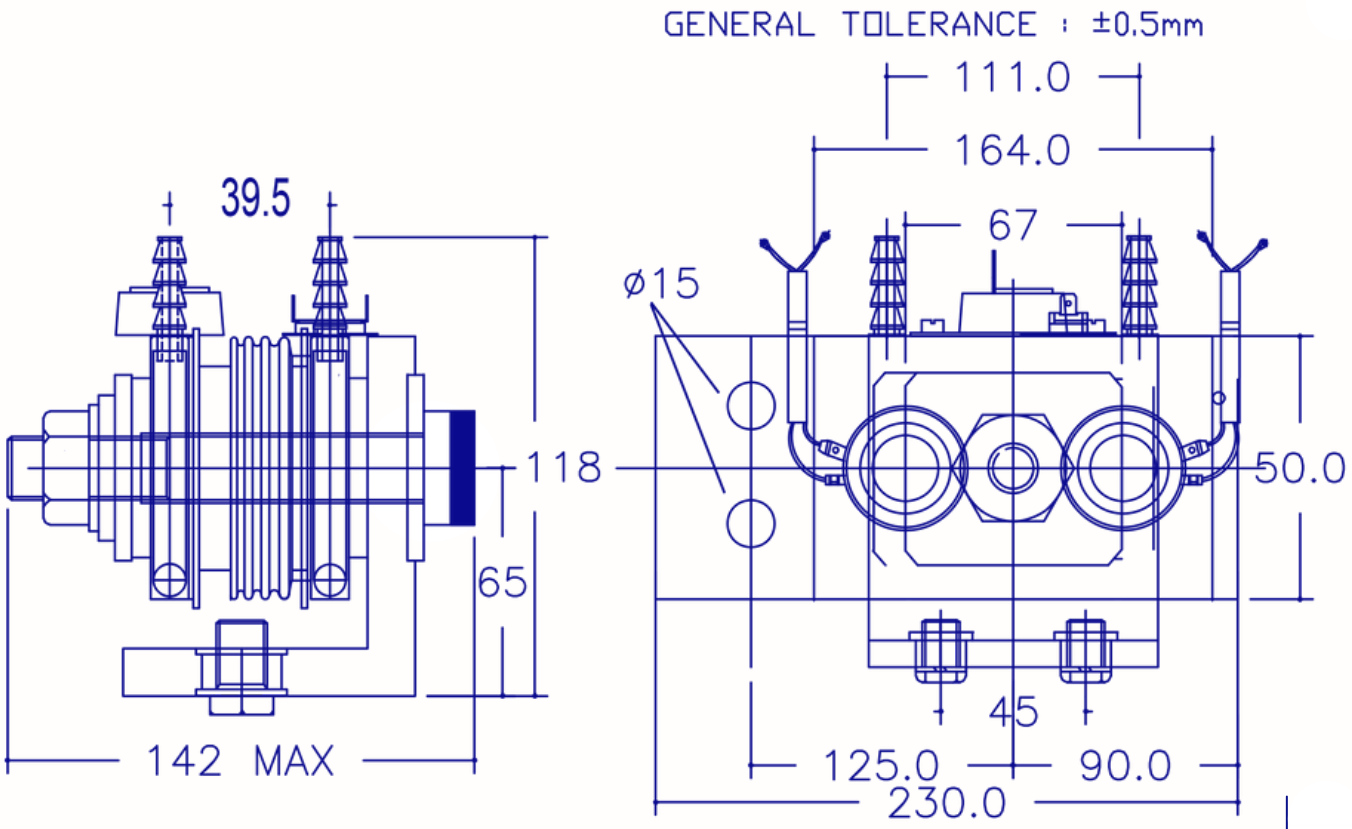


PACKAGE OUTLINE



all dimensions in mm