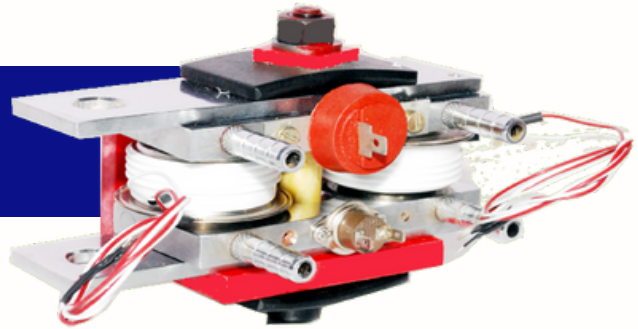


## AC SWITCH (WATER COOLED)

# 2XDCR807SG



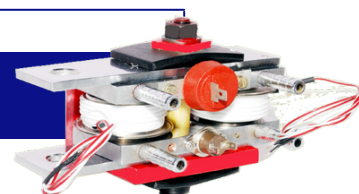
## FEATURES

- 👉 **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**

**AC SWITCH**  
**(WATER COOLED)**  
**2XDCR807SG**



TECHNICAL DATA

**DEVICE TYPE**

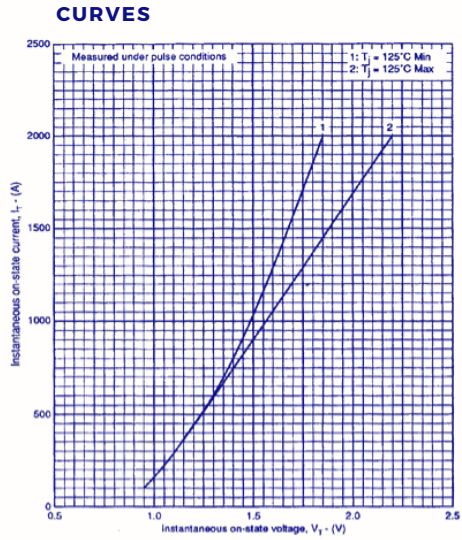
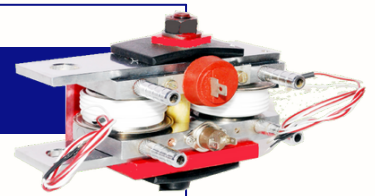
$V_{DRM} / V_{RRM}$   
(V)

$V_{RSM}$   
(V)

2XDCR807SG1515	1500	1600
2XDCR807SG1717	1700	1800

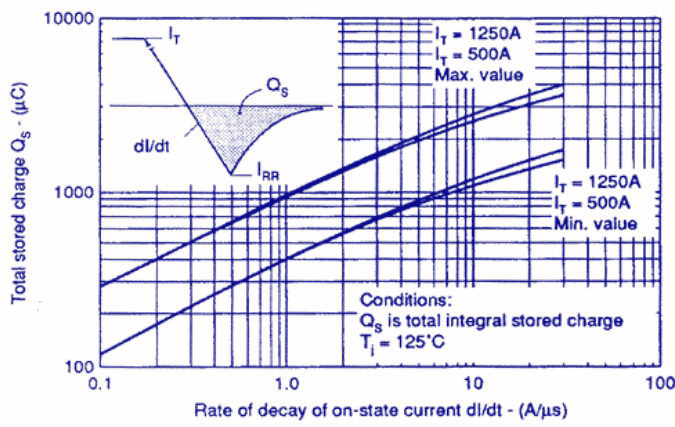
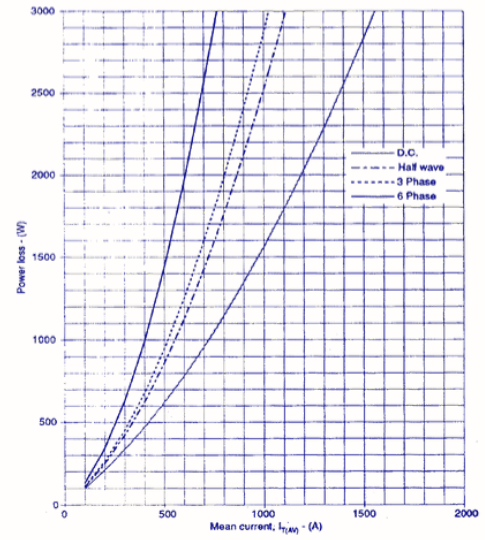
SYMBOL	CONDITIONS	VALUES
$I_{RMS}$	50 Hz, water flow -4L/min, Water temp = 60°C	1220 amp.
$V_{TM}$	Maximum peak forward Voltage drop @ 1600AP	2.0 V
$I_{TSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec	9.0 KA
$I^2t$	Max. $I^2t$ rating (non-rep.) for 10 msec	$405 \times 10^3 A^2s$
$I_{RRM}/I_{DRM}$	Peak reverse current at $T_{vj} = 125^\circ C$	50 mA
$I_{GT}$ $V_{GT}$ $di/dt$ $dv/dt$		200 mA 3.5 V 300 A/us 300 V/us
$V_0$ $R_0$	$T_{vj} = \max$ $T_{vj} = \max$	1.12V 0.530mΩ
$R_{th(w)}$ $T_{vj}$ $T_{stg}$	Junction temperature 125 °C Storage temperature 125 °C	0.14°C/W 125 °C 125 °C
Mounting force		12.5 KN
Weight	Approx.	3.0 Kg
Package Outline		IR-38

**AC SWITCH  
(WATER COOLED)  
2XDCR807SG**



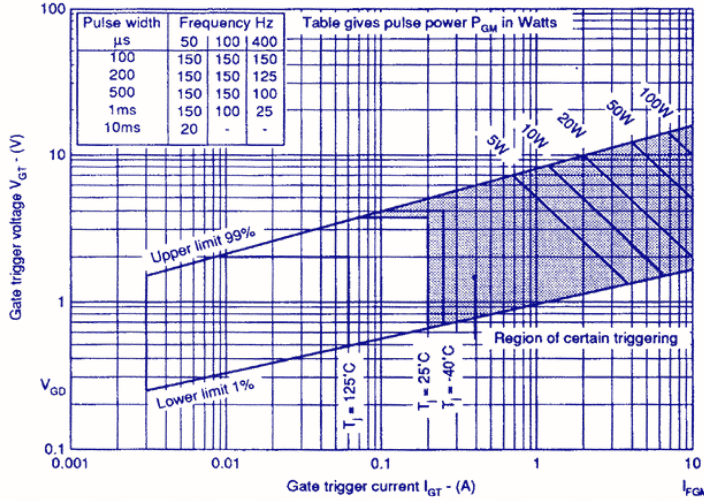
**FIG. 1** maximum (limit) on-state characteristics

**FIG. 2** dissipation curves



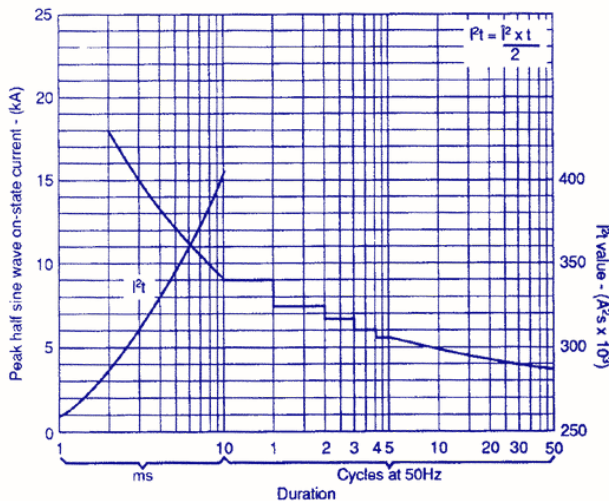
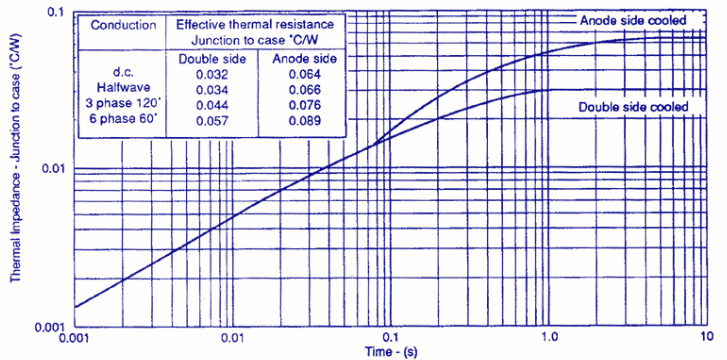
**FIG. 3** stored charge

**AC SWITCH  
(WATER COOLED)  
2XDCR807SG**



**FIG. 4** gate characteristics

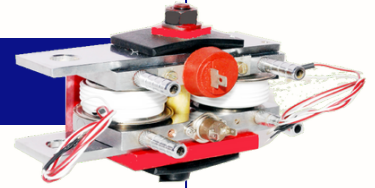
**FIG. 5** maximum (limit) transient thermal impedance-junction to case



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

**AC SWITCH**  
 (WATER COOLED)

**2XDCR807SG**



PACKAGE OUTLINE

