

# Thyristors

## DCR1474



### Technical Data

Typical applications : D.C. Motor control, Controlled rectifiers, High power drives.

Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
DCR1474/04	400	500
DCR1474/06	600	700
DCR1474/08	800	900
DCR1474/12	1200	1300
DCR1474/14	1400	1500
DCR1474/16	1600	1700
DCR1474/18	1800	1900

### Features

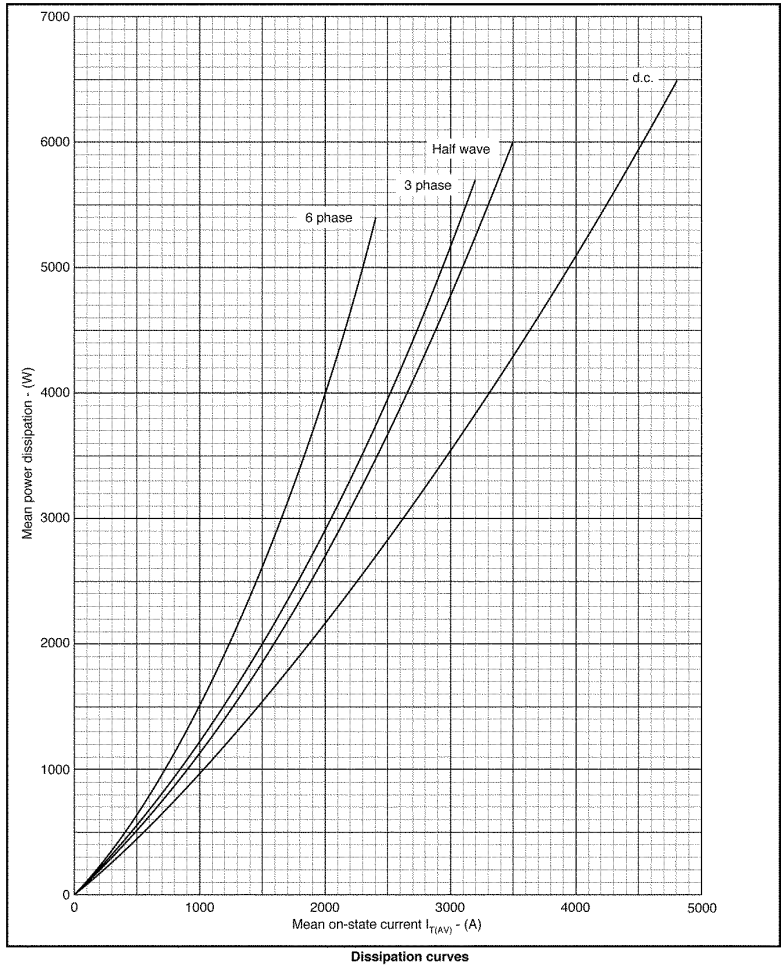
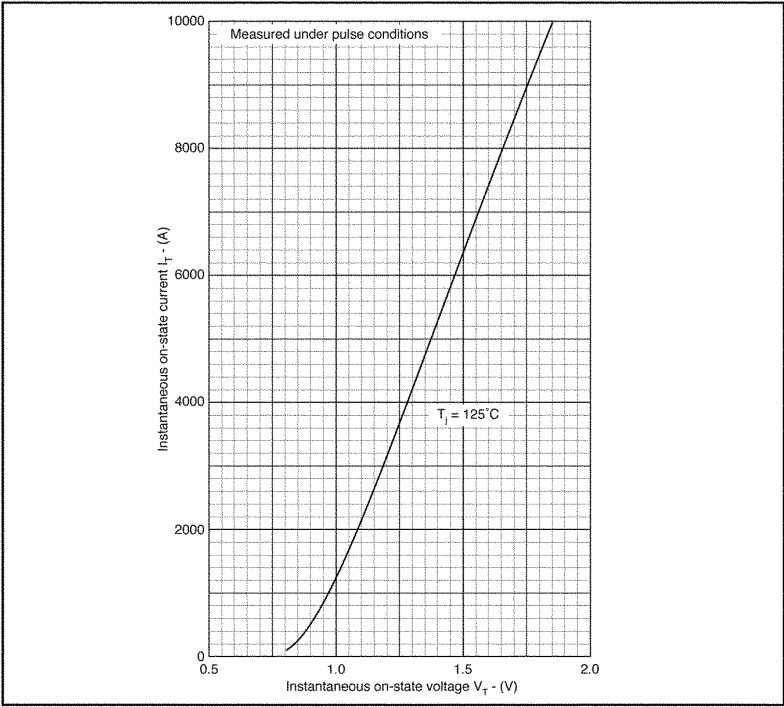
- Double side cooling.
- Voltage grade upto 1600V
- Weight 1600 gm (Approx.)

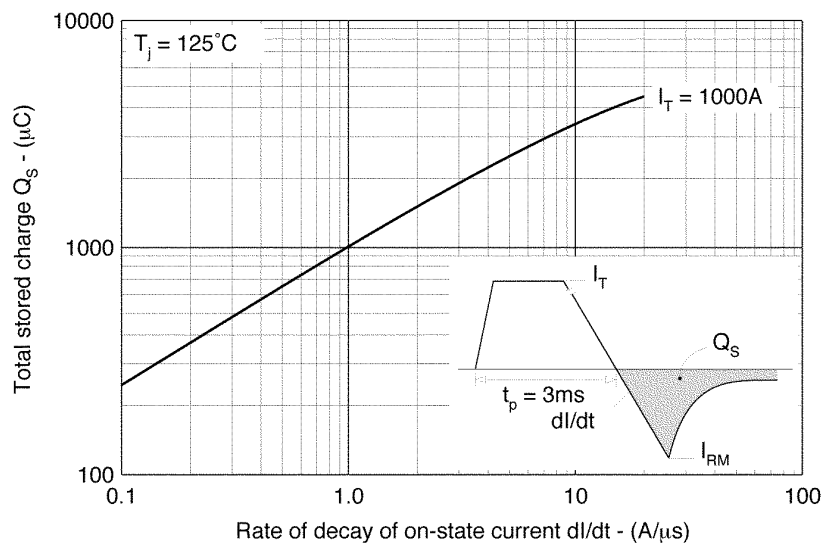
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_C = 60^\circ C$	3600 A
$I_{TSM}$	$T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 50\% V_{RRM}$ $T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 0$	49.0 KA 61.2 KA
$I^2t$	$T_{vj} = 125^\circ C$ , 10 ms half sine, $V_R = 50\% V_{RRM}$ $T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 0$	12000000 $A^2s$ 18750000 $A^2s$
$I_{GT}$ $V_{GT}$ $dv/dt$ $[di/dt]_{CR}$	$T_{vj} = 25^\circ C$ ; $V_{DRM} = 5V$ $T_{vj} = 25^\circ C$ ; $V_{DRM} = 5V$ $T_{vj} = 125^\circ C$ ; Voltage = 67 % $V_{DRM}$ Repetitive 50 Hz	400 mA 4.0 V *200 V/ $\mu s$ 300 A/ $\mu s$
$V_T$ $V_O$ $R_O$ $I_{RRM}/I_{DRM}$	$T_{vj} = 25^\circ C$ ; $I_T = 2900 A$ $T_{vj} = 125^\circ C$ $T_{vj} = 125^\circ C$ $T_{vj} = 130^\circ C$	1.30 V max 0.92 V 0.09 m 250 mA
$I_H$ $I_L$		500 mA 1000 mA
$R_{th(j-c)}$ $R_{th(c-h)}$ $T_{vj}$ $T_{stg}$	dc	0.0095 $^\circ C/W$ 0.002 $^\circ C/W$ +125 $^\circ C$ -40....+125 $^\circ C$
Mounting Force		38-47 KN
Case outline		Y

\* Higher dv/dt selection available.

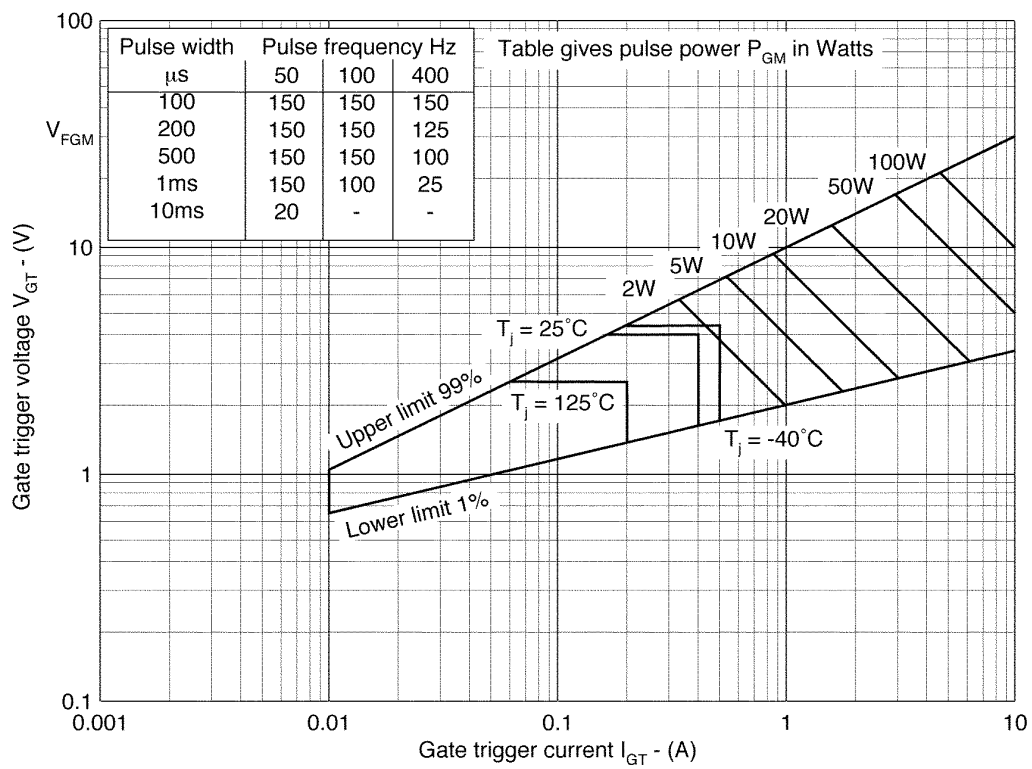


CURVES

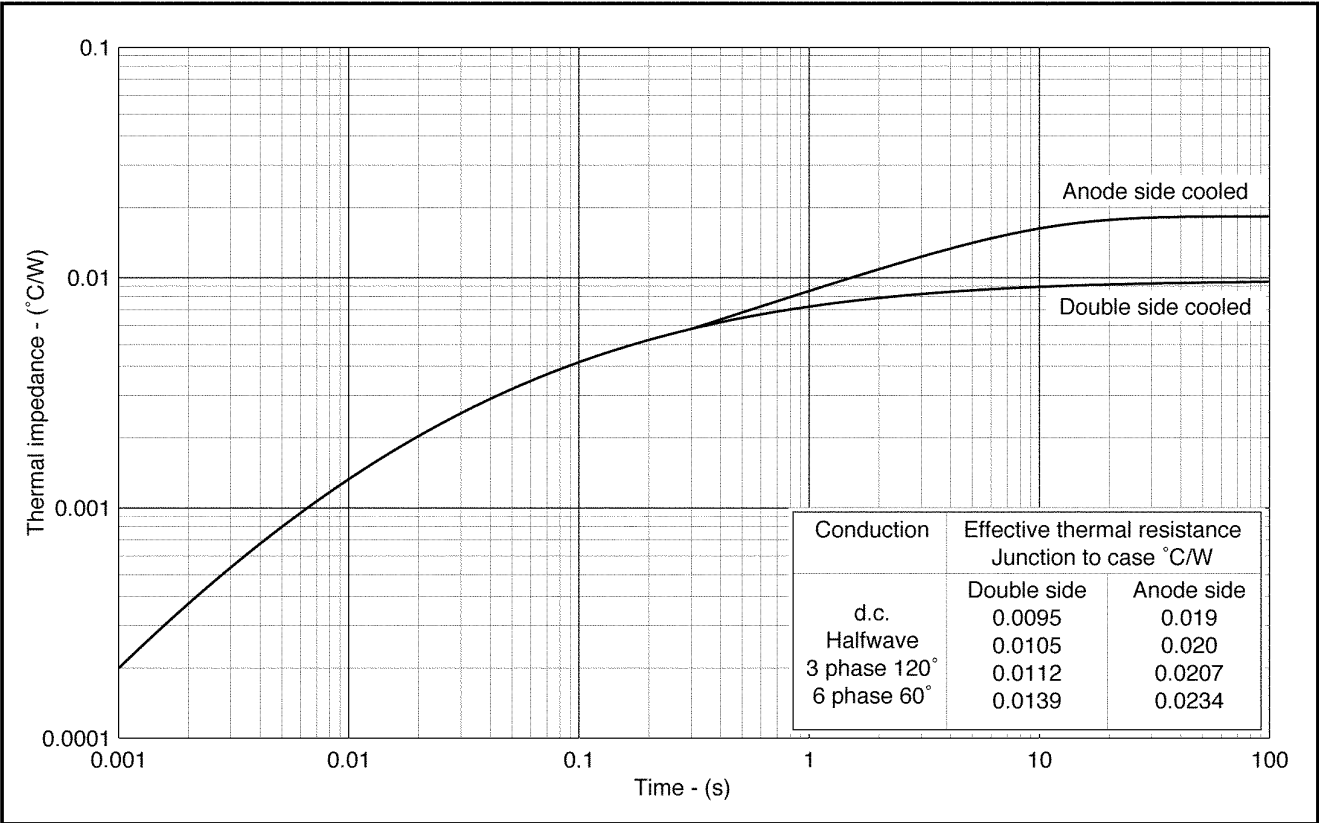




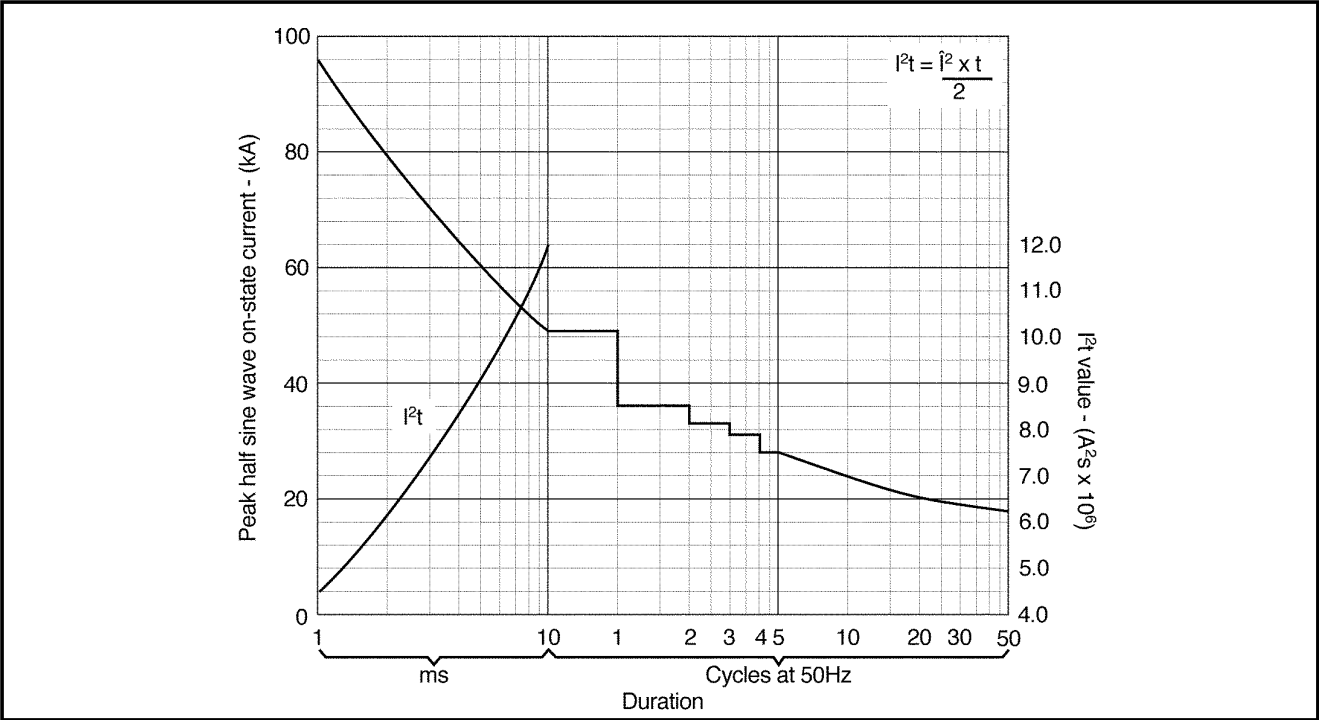
Stored charge



Gate characteristics



Maximum (limit) transient thermal impedance - junction to case



Surge (non-repetitive) on-state current vs time (with 50%  $V_{RRM}$  at  $T_{case} 125^{\circ}\text{C}$ )

**PACKAGE DETAILS**

DO NOT SCALE.

