

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.)

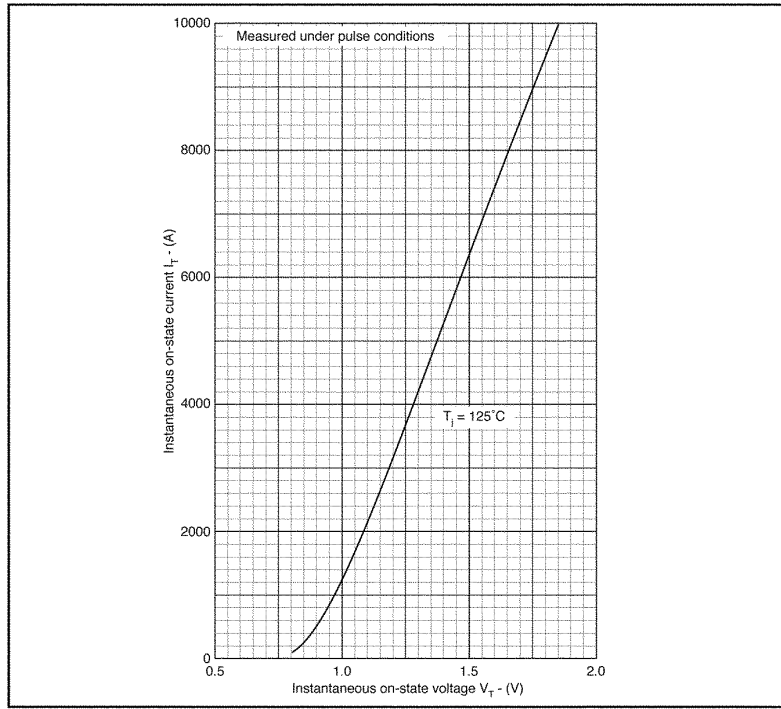
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_C = 60^\circ C$	3600 A
I_{TSM}	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 50\% V_{RRM}$	49.0 KA
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	61.2 KA
I^2t	$T_{vj} = 125^\circ C$, 10 ms half sine, $V_R = 50\% V_{RRM}$	12000000 A^2s
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	18750000 A^2s
I_{GT} V_{GT} dv/dt [di/dt] _{CR}	$T_{vj} = 25^\circ C$; $V_{DRM} = 5V$	400 mA
	$T_{vj} = 25^\circ C$; $V_{DRM} = 5V$	4.0 V
	$T_{vj} = 125^\circ C$; Voltage = 67 % V_{DRM}	*200 V/ μs
	Repetitive 50 Hz	300 A/ μs
V_T V_O R_O I_{RRM}/I_{DRM}	$T_{vj} = 25^\circ C$; $I_T = 2900 A$	1.30 V max
	$T_{vj} = 125^\circ C$	0.92 V
	$T_{vj} = 125^\circ C$	0.09 m
	$T_{vj} = 130^\circ C$	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.

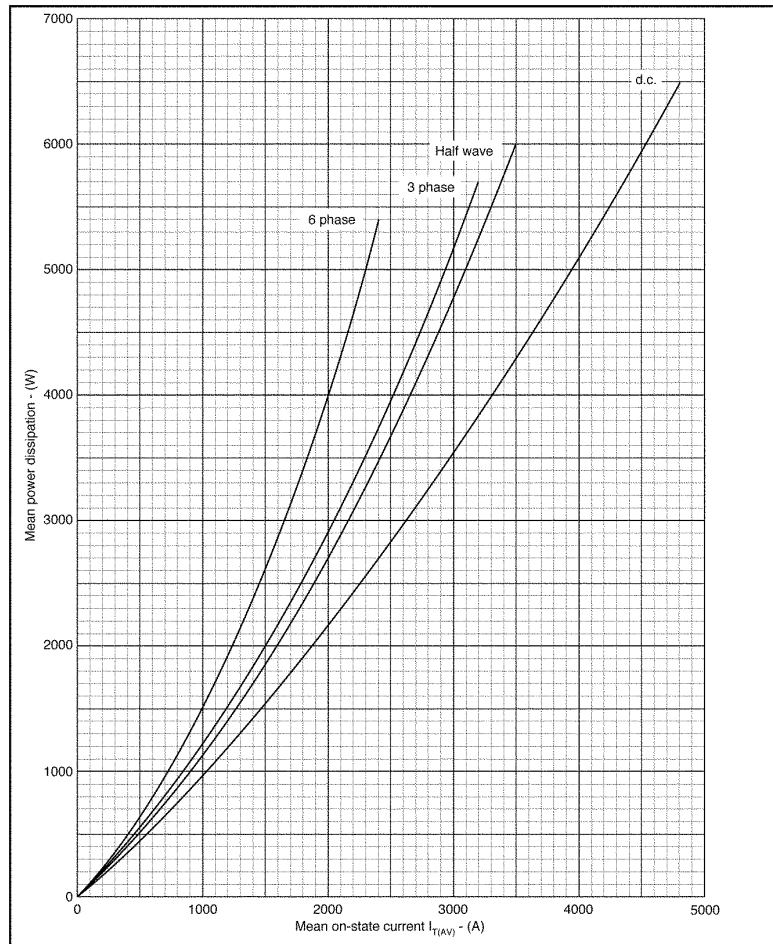


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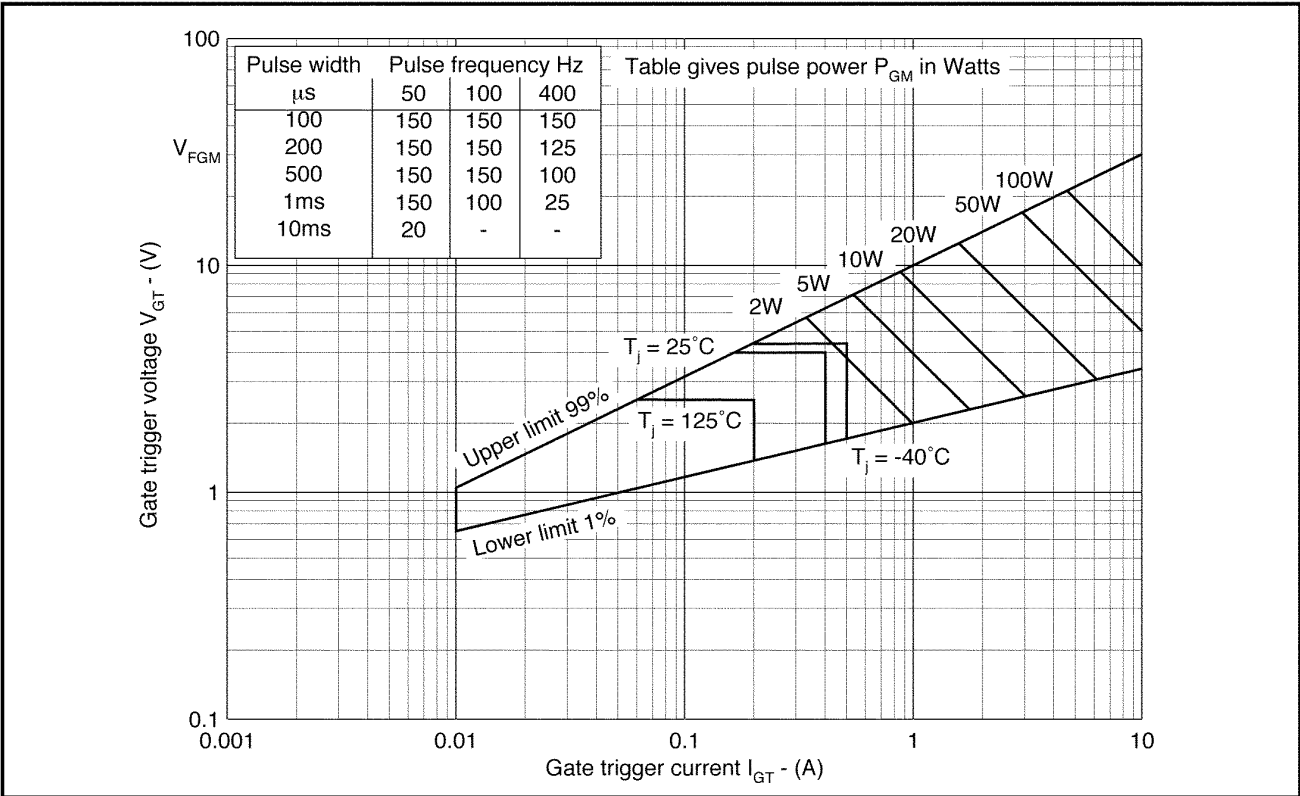
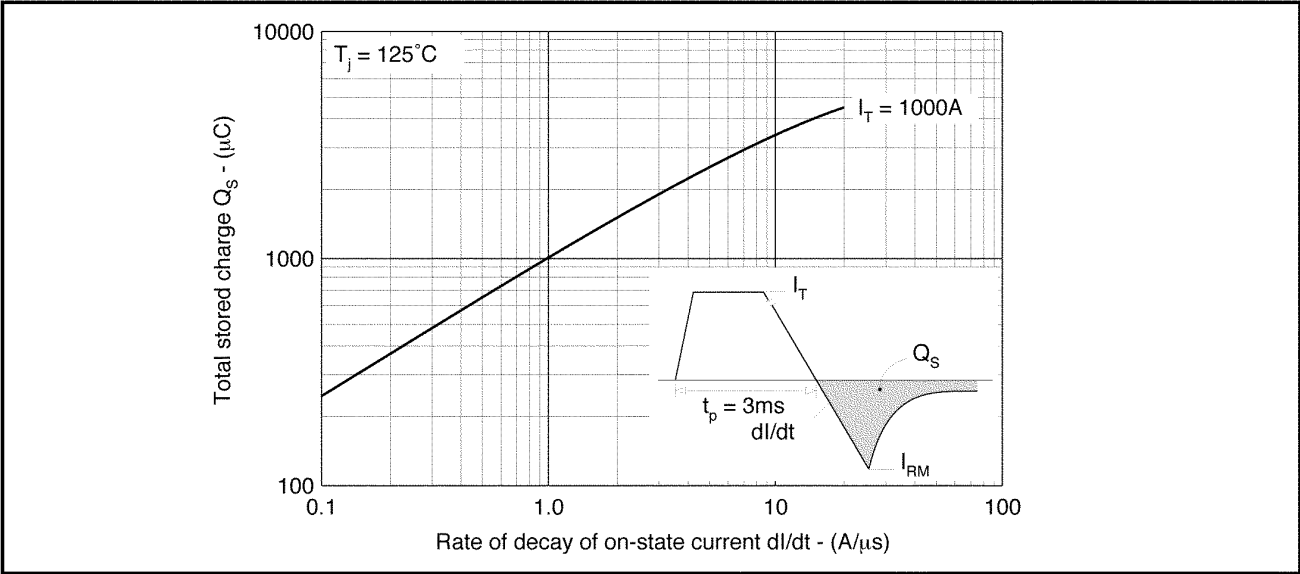
CURVES

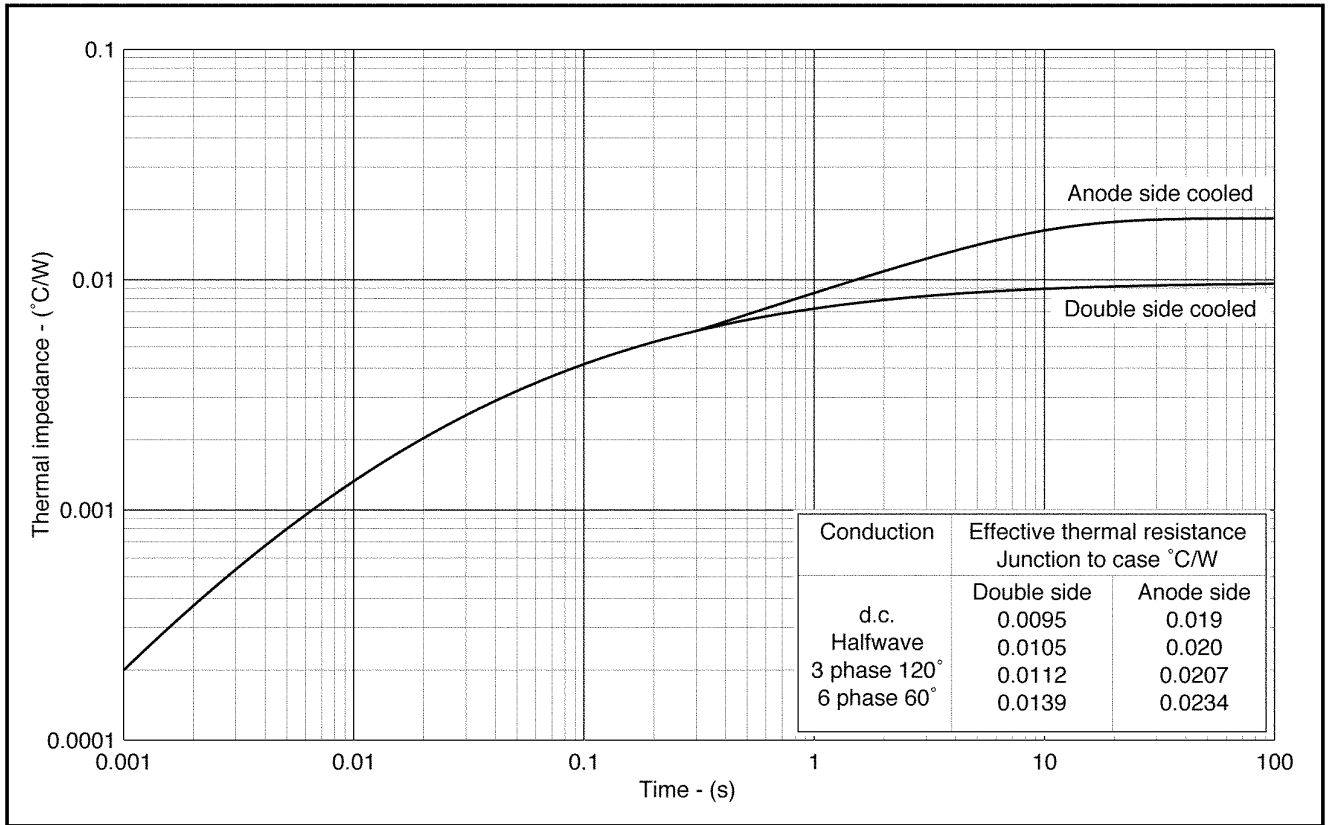


Maximum (limit) on-state characteristics

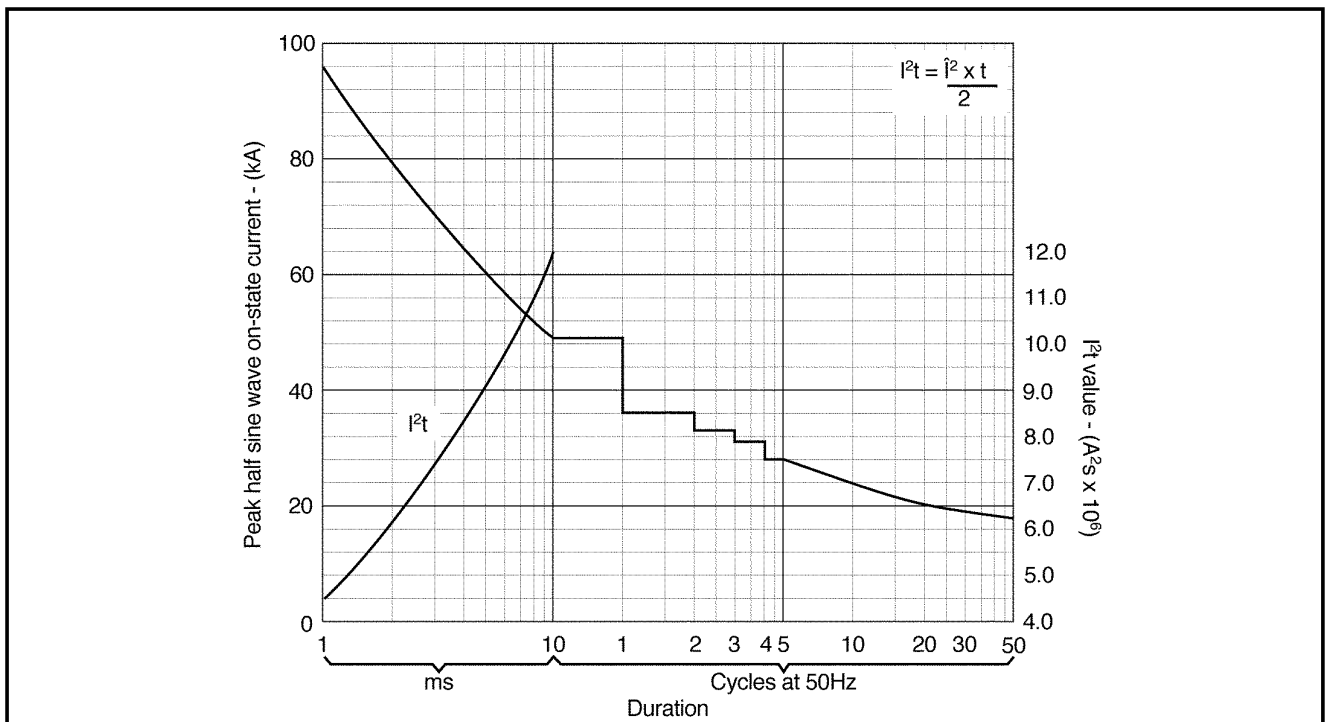


Dissipation curves





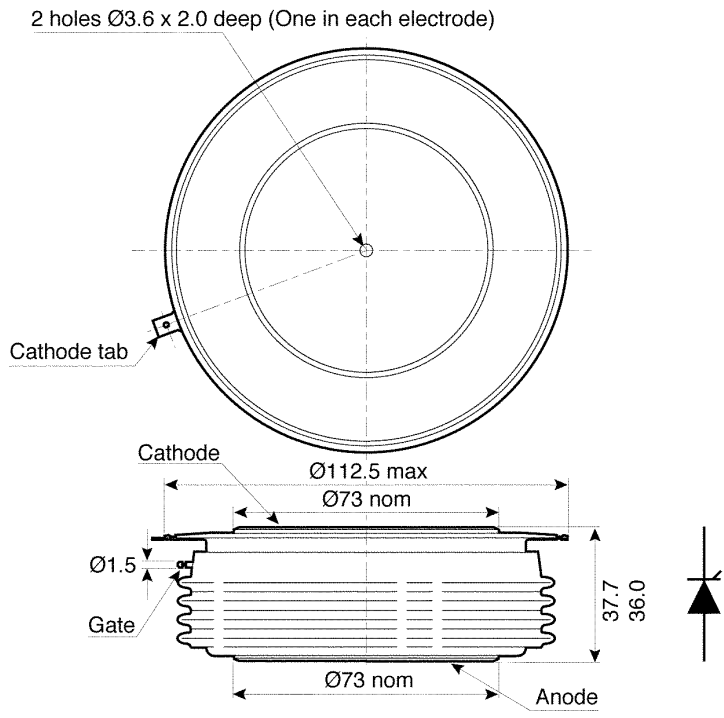
Maximum (limit) transient thermal impedance - junction to case



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

PACKAGE DETAILS

DO NOT SCALE.



Nominal weight: 1600g
Clamping force: 38 - 47 kN

Package outline type code: Y