

Thyristors

DCR1275



Technical Data

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

Type No.	V_{RRM} (Volts)	V_{RSM} (Volts)
DCR1275/22	2200	2300
DCR1275/26	2600	2700
DCR1275/28	2800	2900

Features

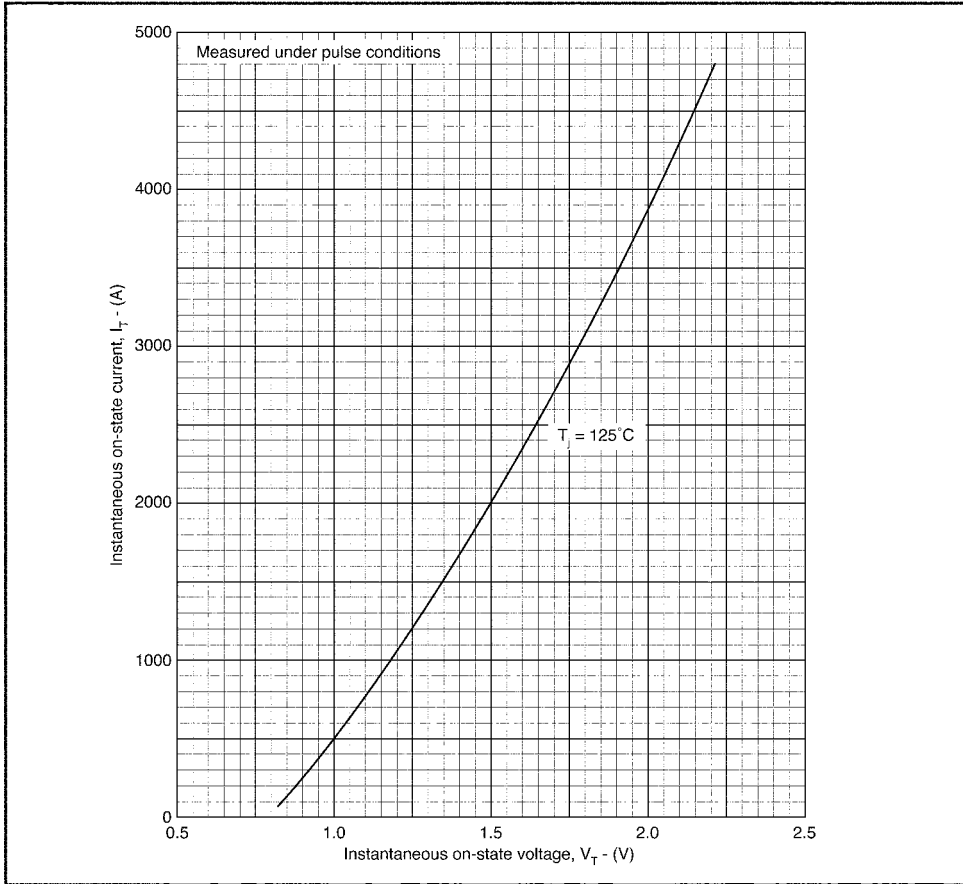
- Double side cooling.
- Voltage grade upto 2800V
- Weight 500gm (Approx.)

Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_C = 60^\circ C$	1514 A
I_{TSM}	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 50\% V_{RRM}$	22.5 KA
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	28.0 KA
I^2t	$T_{vj} = 125^\circ C$, 10 ms half sine, $V_R = 50\% V_{RRM}$	2530000 A^2s
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	3920000 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}	*300 V/ μs
	Repetitive 50 Hz	100 A/ μs
V_T V_O R_O I_{RRM}/I_{DRM}	$T_{vj} = 25^\circ C$; $I_T = 2900 A$	1.625 V max
	$T_{vj} = 125^\circ C$	0.92 V
	$T_{vj} = 125^\circ C$	0.276 m
	$T_{vj} = 130^\circ C$	150 mA
I_H I_L	$T_j = 25^\circ C$; $R_{\theta-K} =$	500 mA
	$T_j = 25^\circ C$; $V_D = 5V$	1000 mA
$R_{th(j-c)}$ $R_{th(c-h)}$ T_{vj} T_{stg}	dc	0.020 $^\circ C/W$
		0.004 $^\circ C/W$
		+125 $^\circ C$
		-40....+125 $^\circ C$
Mounting Force		20-22 KN
Case outline		D

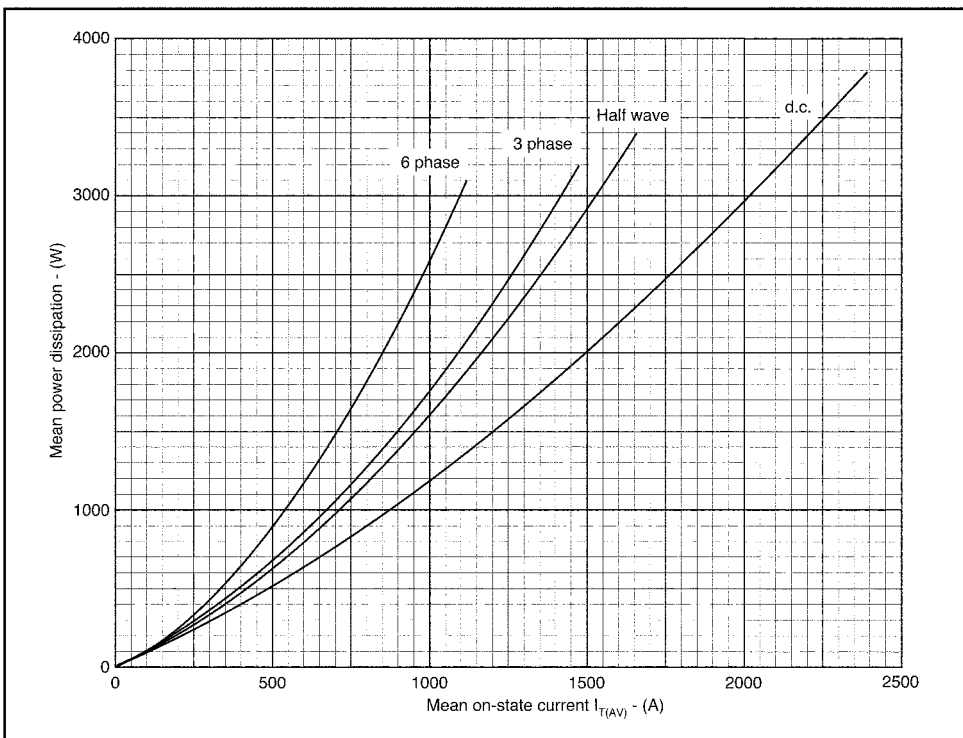
* Higher dv/dt selection available.



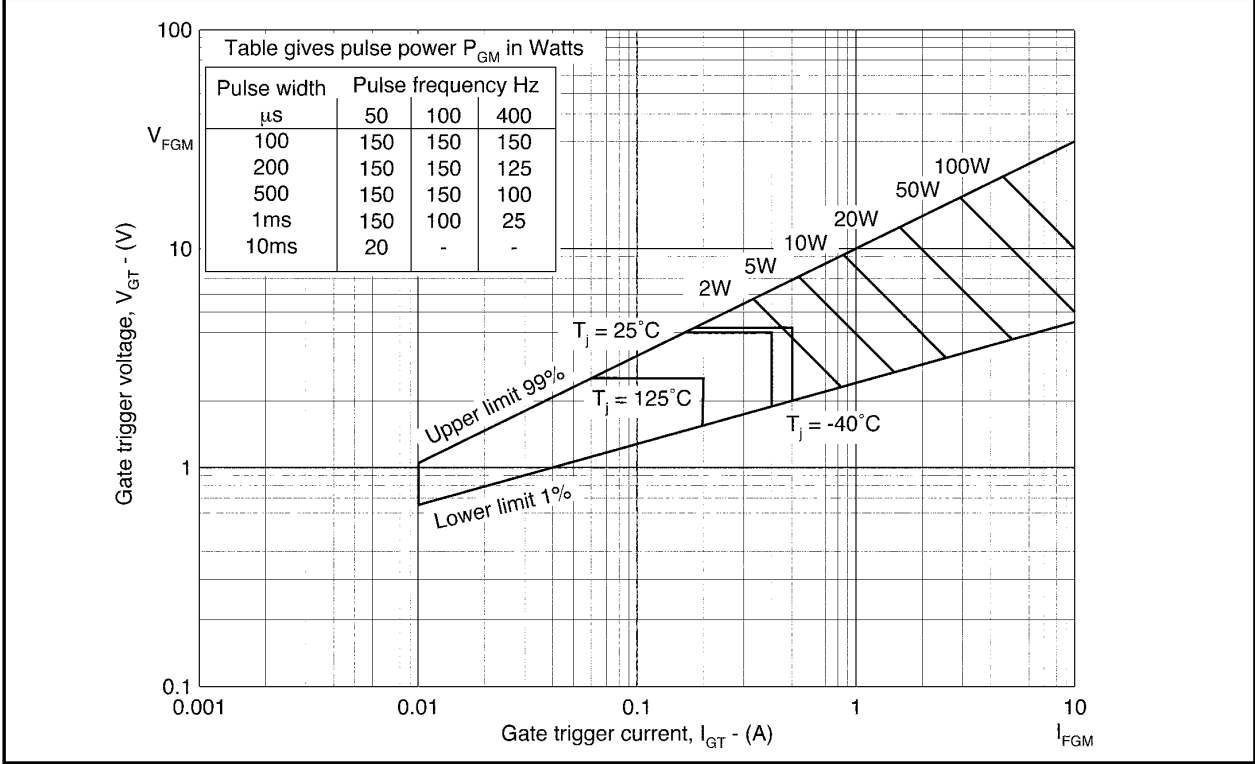
CURVES



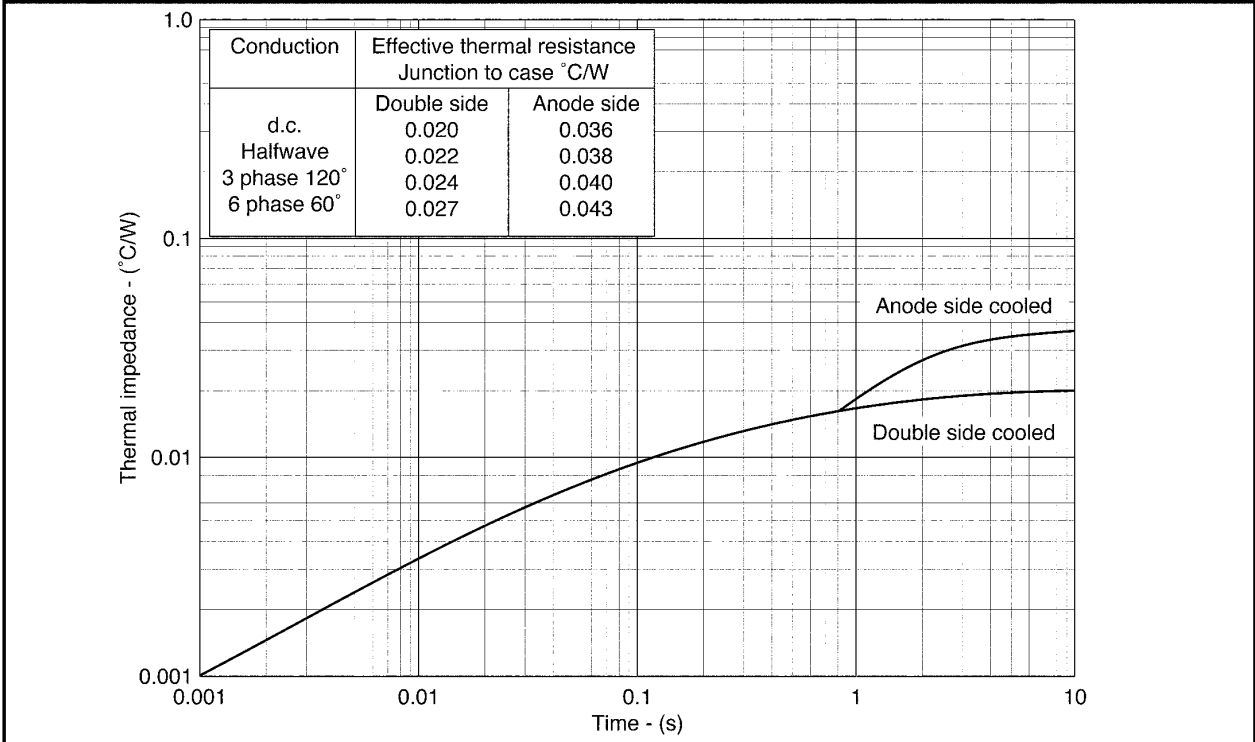
Maximum (limit) on-state characteristics



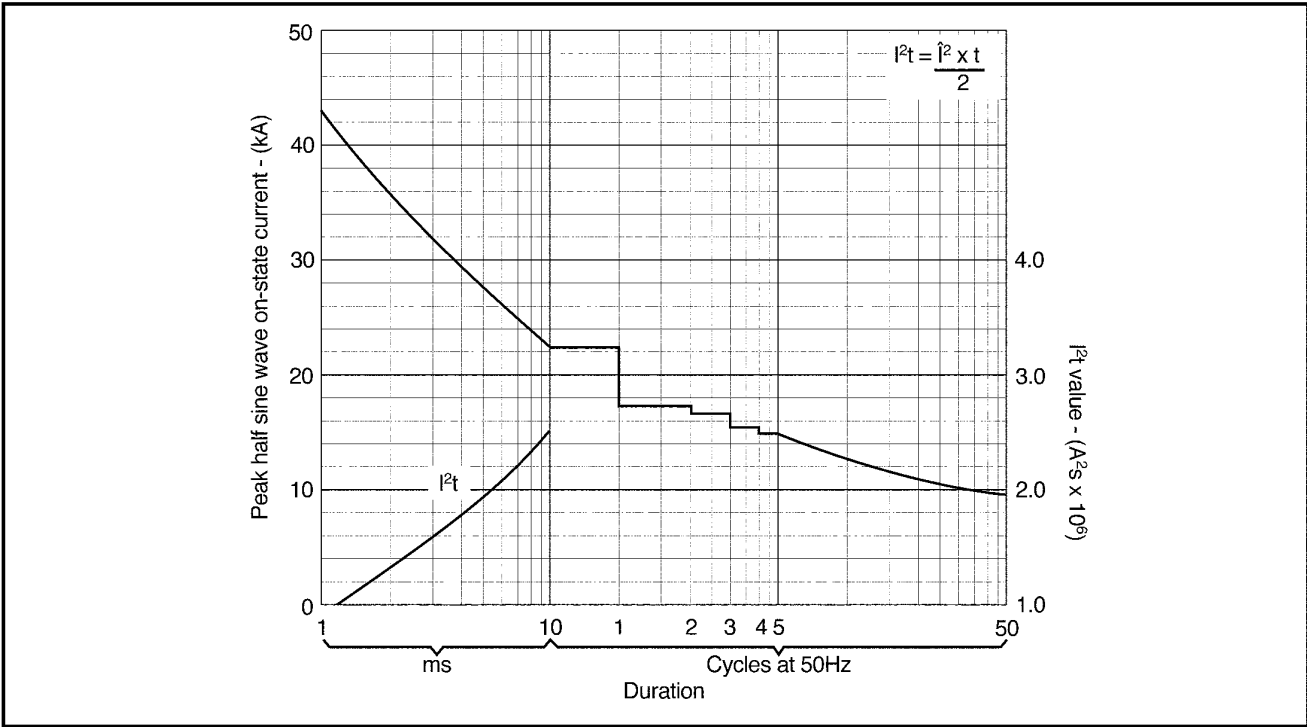
Dissipation curves



Gate characteristics



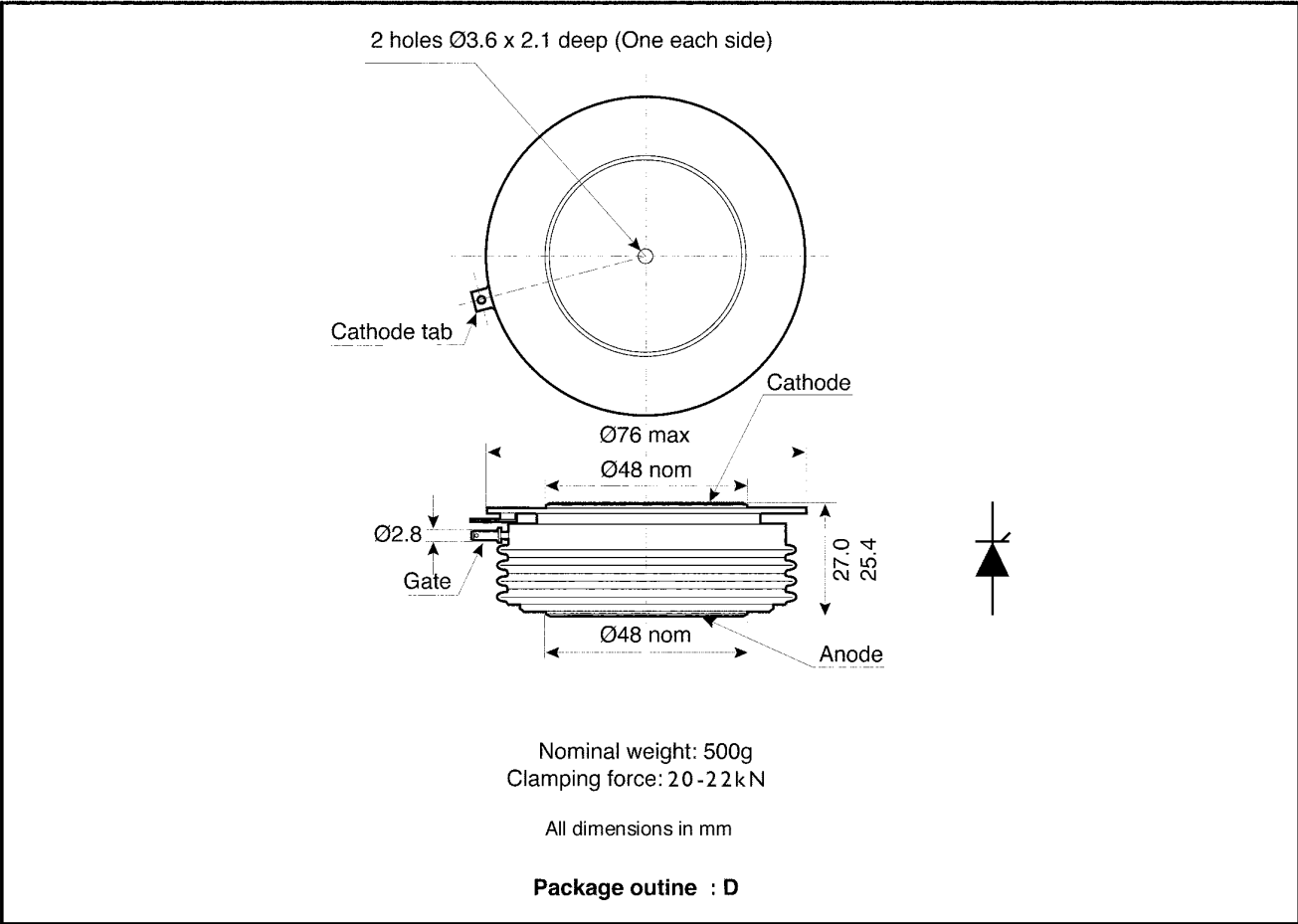
Maximum (limit) transient thermal impedance - junction to case



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

PACKAGE DETAILS

DO NOT SCALE



Nominal weight: 500g
Clamping force: 20-22 kN

All dimensions in mm

Package outline : D