

# Thyristors

## DCR1279



### Technical Data

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

Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
DCR1279/26	2600	2700
DCR1279/30	3000	3100
DCR1279/34	3400	3500
DCR1279/36	3600	3700
DCR1279/40	4000	4100
DCR1279/44	4400	4500
DCR1279/48	4800	4900

### Features

- Double side cooling.
- Voltage grade upto 4800V
- Weight 500 gm (Approx.)

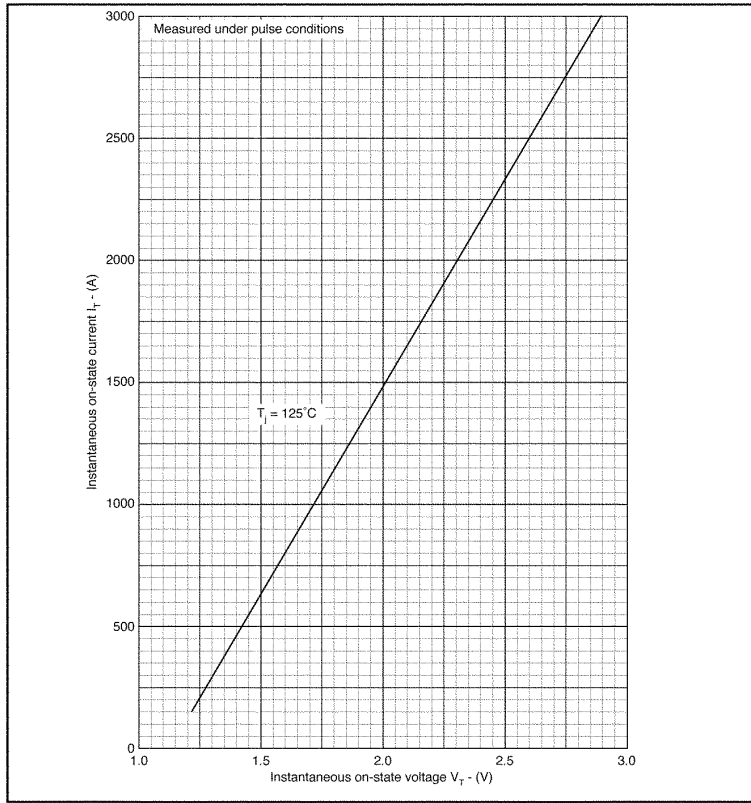
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_C = 60^\circ C$	1088A
$I_{TSM}$	$T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 50\% V_{RRM}$	12 KA
	$T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 0$	15 KA
$I^2t$	$T_{vj} = 125^\circ C$ , 10 ms half sine, $V_R = 50\% V_{RRM}$	720000 A <sup>2</sup> s
	$T_{vj} = 125^\circ C$ ; 10 ms half sine, $V_R = 0$	1120000 A <sup>2</sup> s
$I_{GT}$ $V_{GT}$ dv/dt [di/dt] <sub>CR</sub>	$T_{vj} = 25^\circ C$ ; $V_{DRM} = 5V$	400 mA
	$T_{vj} = 25^\circ C$ ; $V_{DRM} = 5V$	4.0 V
	$T_{vj} = 125^\circ C$ ; Voltage = 67 % $V_{DRM}$	*200V/ $\mu$ s
	Repetitive 50 Hz	100 A/ $\mu$ s
$V_T$ $V_O$ $R_O$ $I_{RRM}/I_{DRM}$	$T_{vj} = 25^\circ C$ ; $I_T = 2900 A$	2.40 V max
	$T_{vj} = 125^\circ C$	1.14 V
	$T_{vj} = 125^\circ C$	0.587 m
	$T_{vj} = 125^\circ C$	150 mA
$I_H$ $I_L$		500 mA
		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.

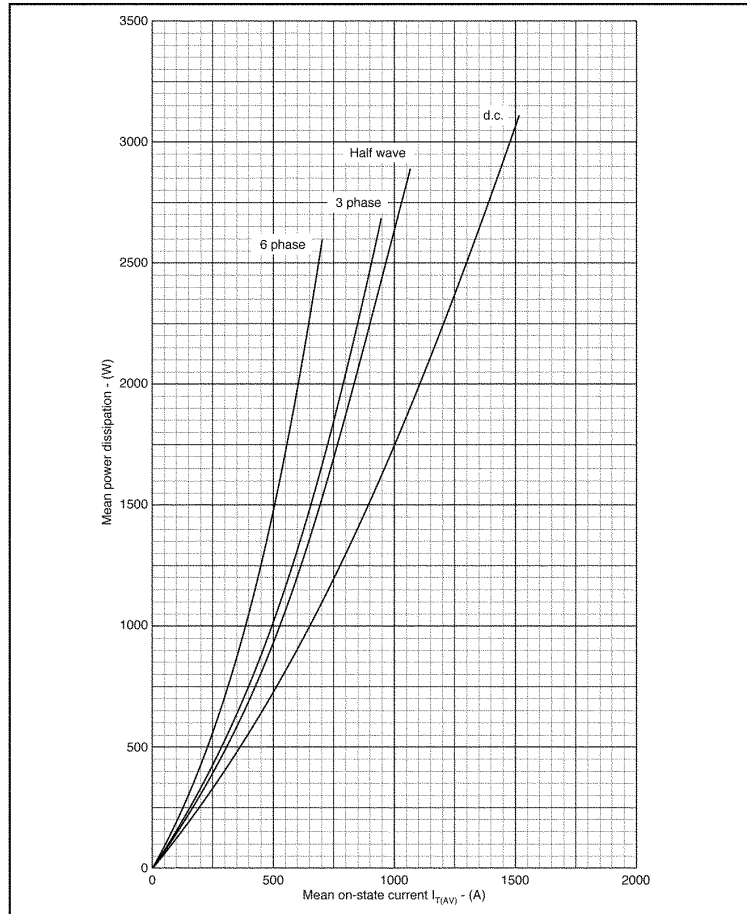


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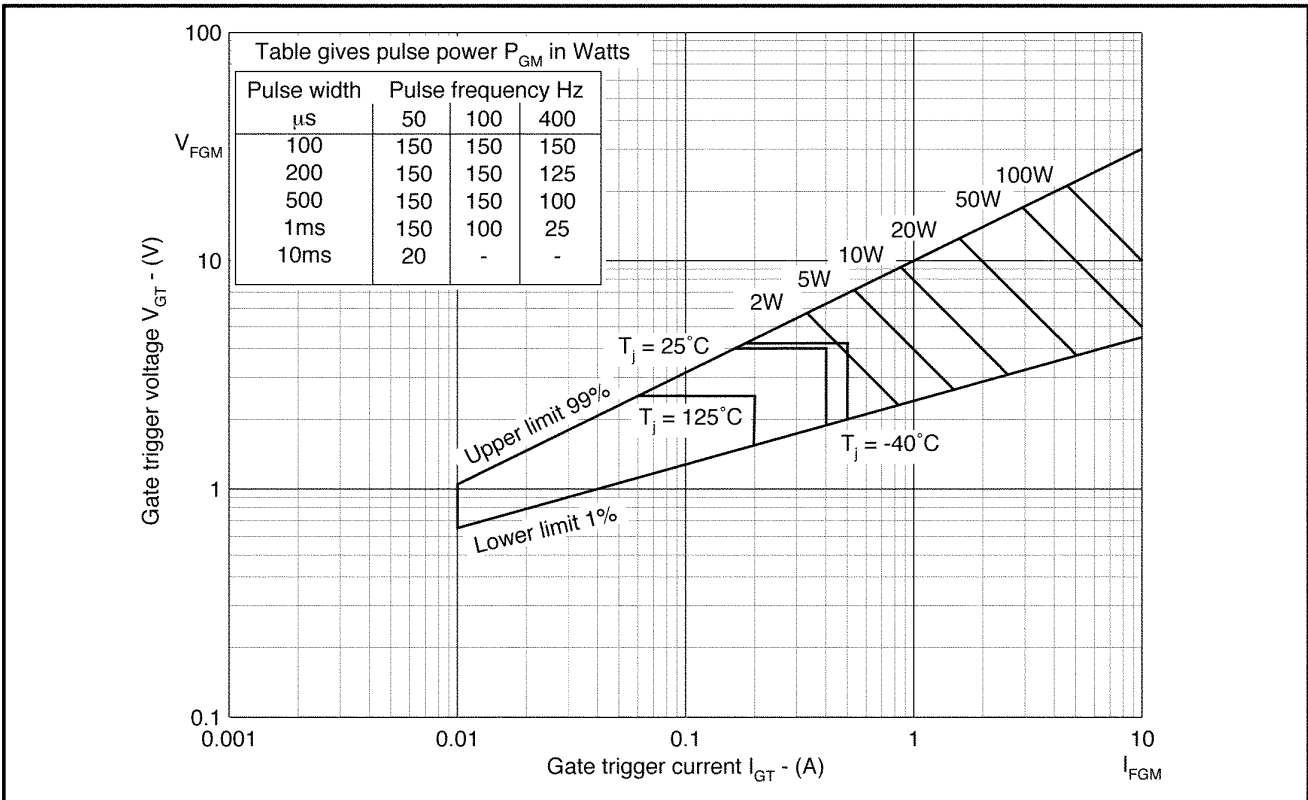
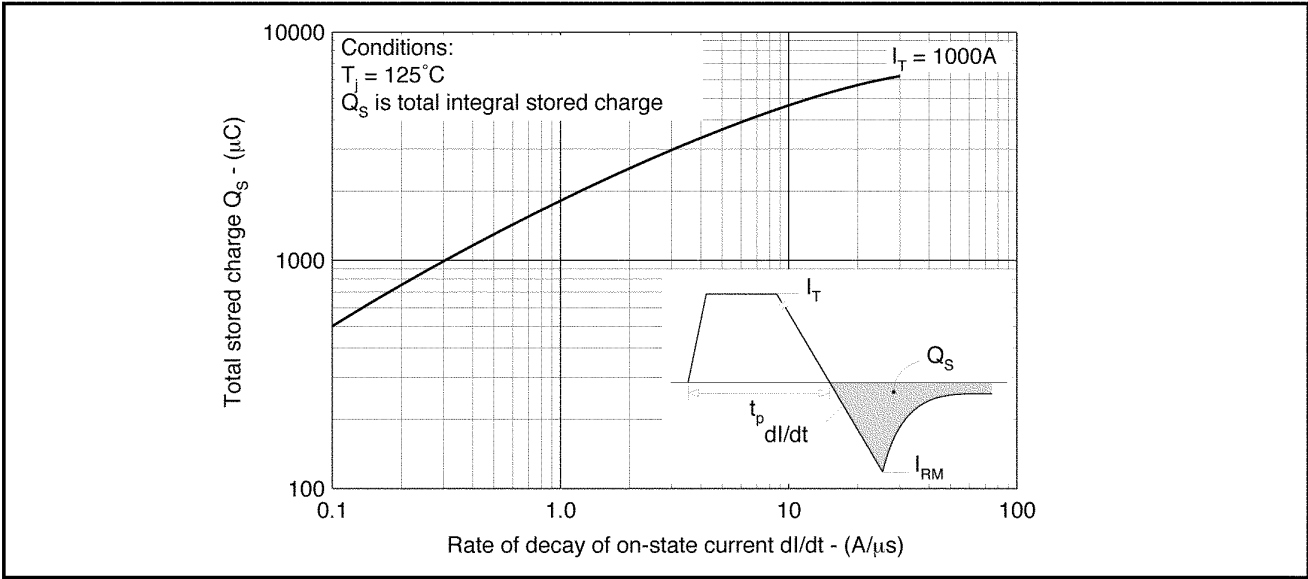
CURVES

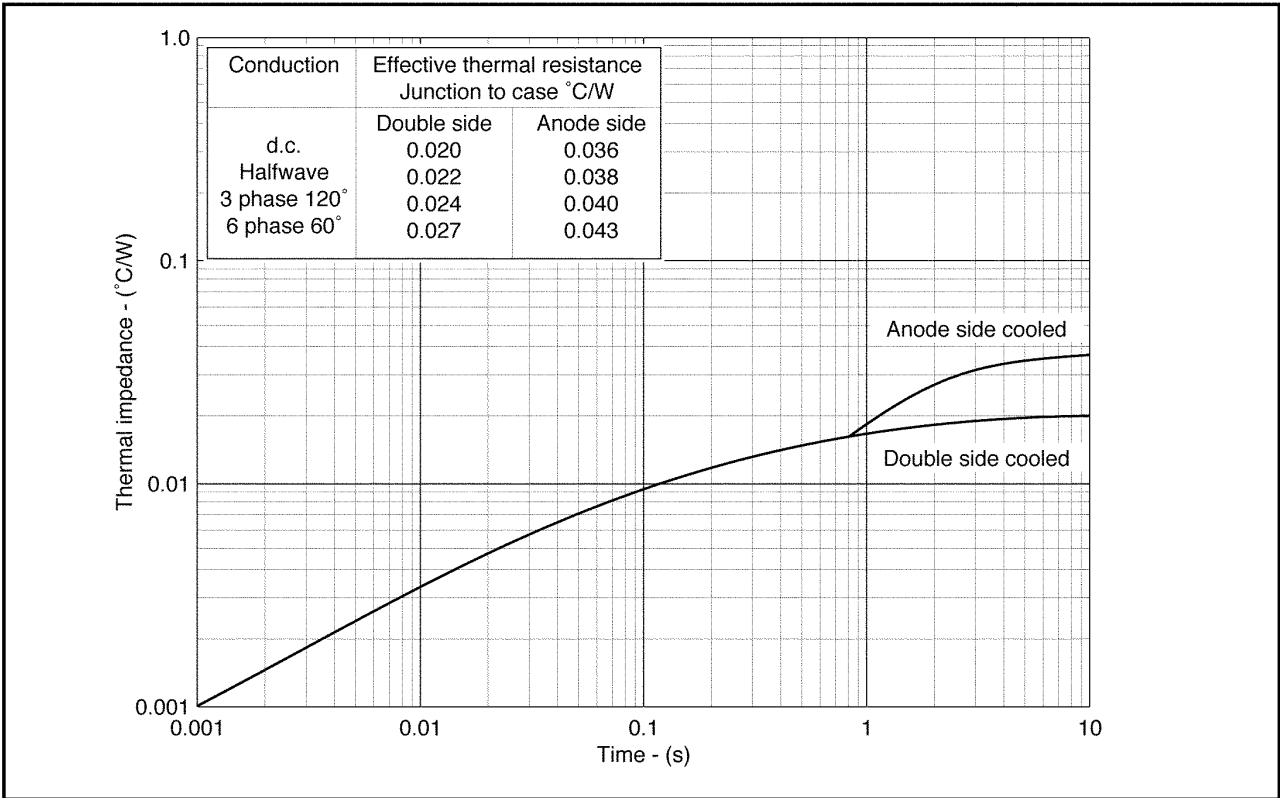


Maximum (limit) on-state characteristics

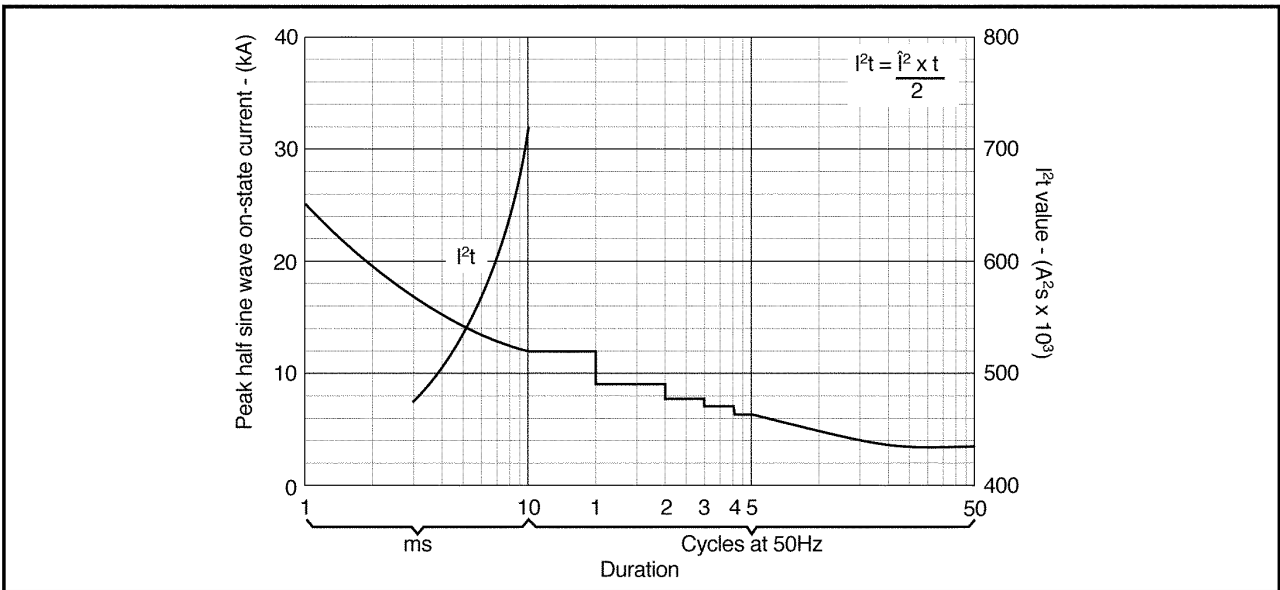


Dissipation curves





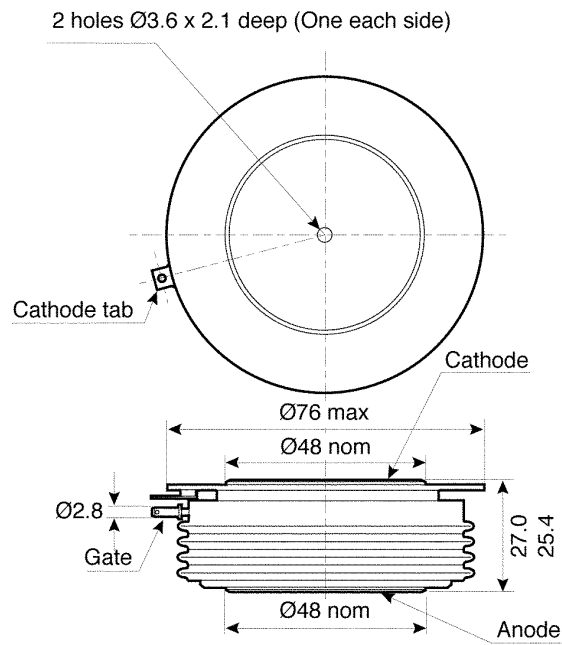
Maximum (limit) transient thermal impedance - junction to case



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

## PACKAGE DETAILS

DO NOT SCALE.



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

**Package outline : D**