

Thyristors

DCR1006



Technical Data

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

Type No.	V_{RRM} (Volts)	V_{RSM} (Volts)
DCR1006/16	1600	1700
DCR1006/18	1800	1900
DCR1006/20	2000	2100
DCR1006/22	2200	2300
DCR1006/26	2600	2700
DCR1006/28	2800	2900

Features

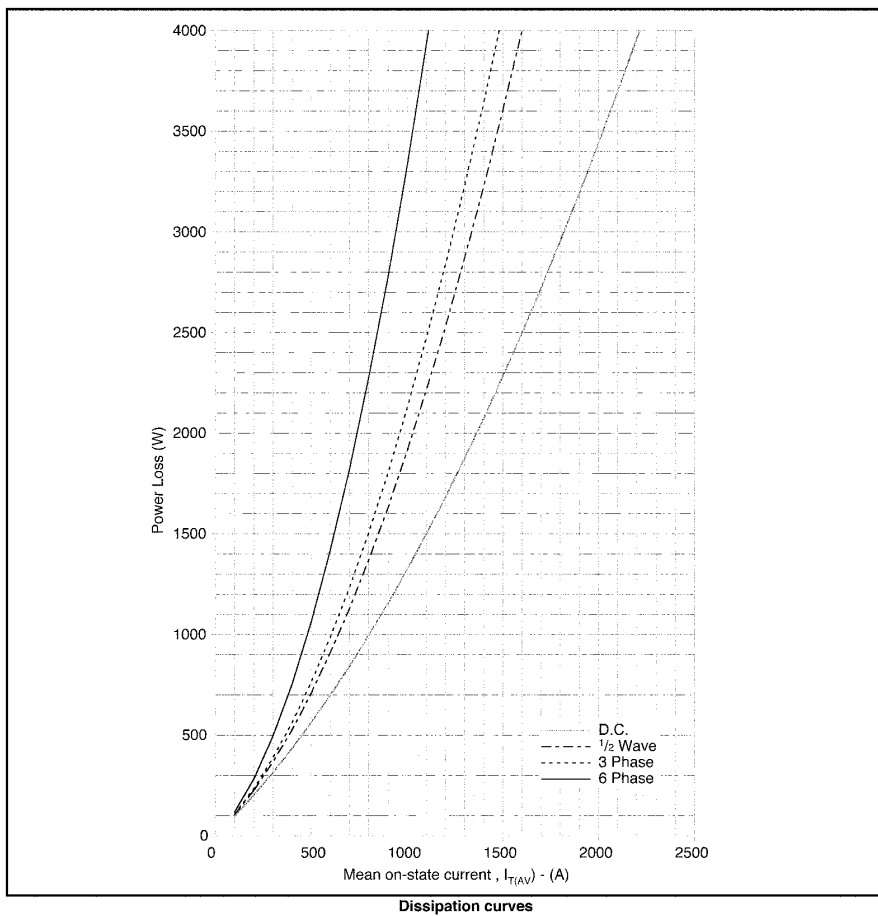
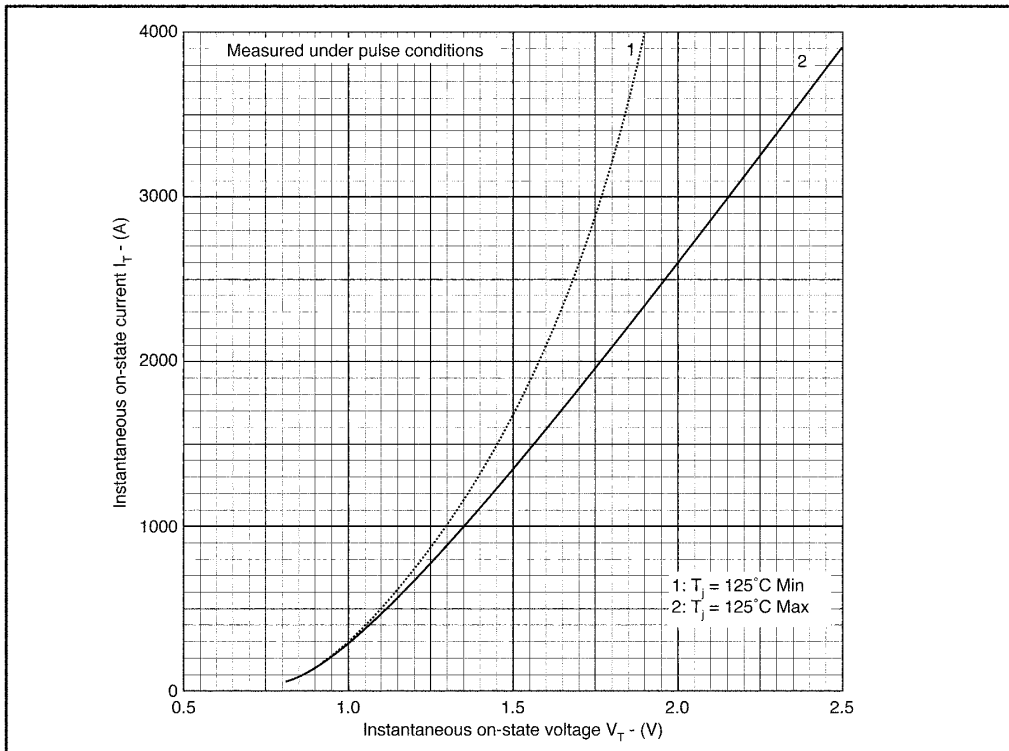
- Double side cooling.
- Voltage grade upto 2800V.
- Weight 500gm (Approx.)

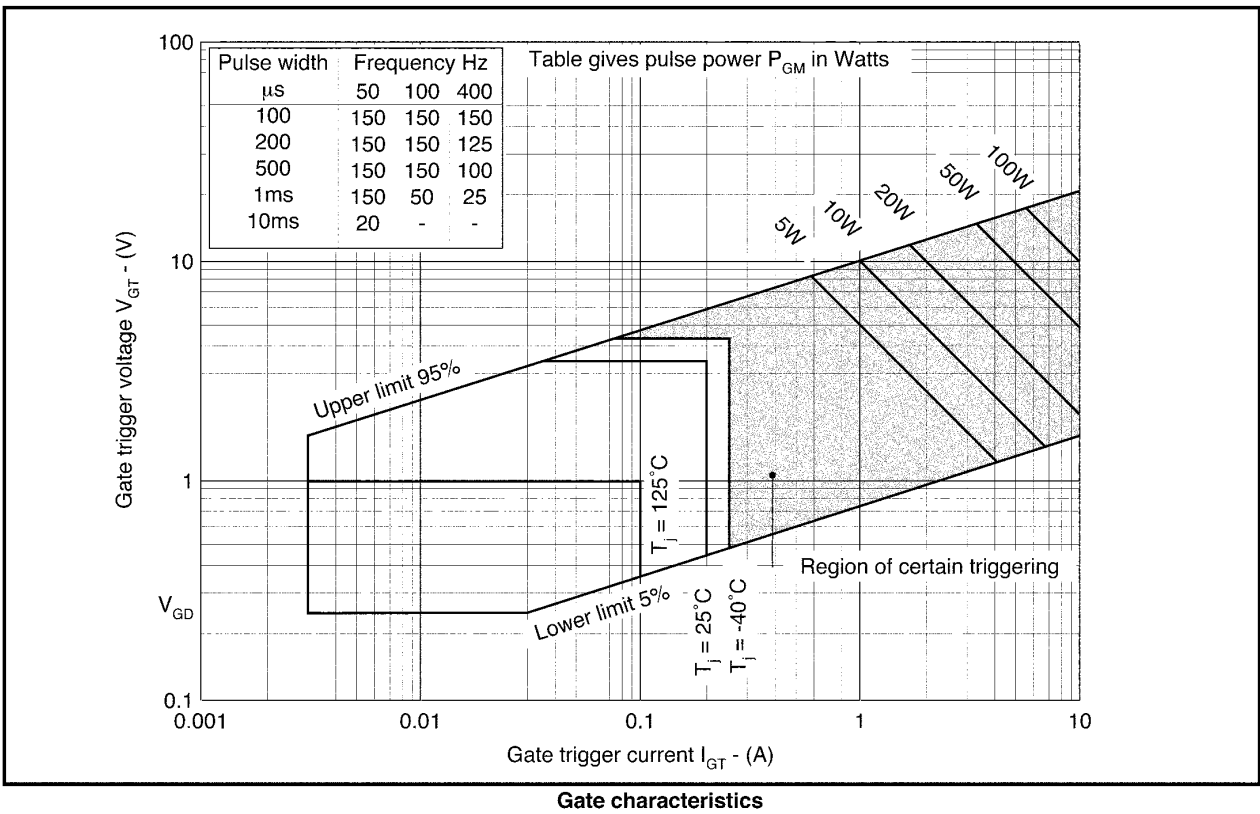
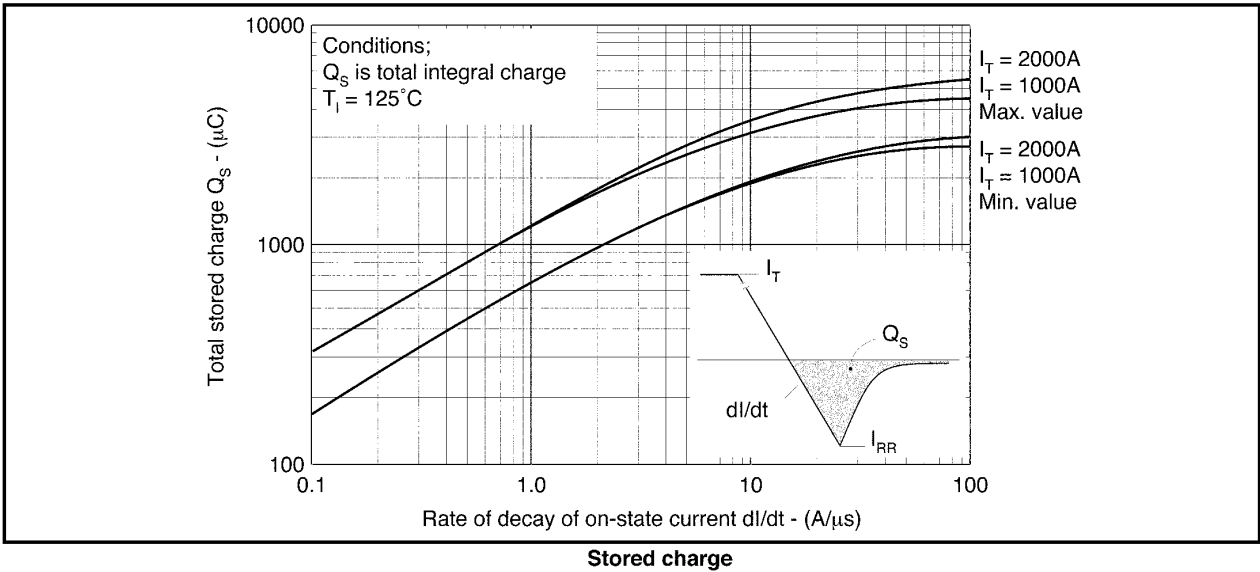
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load $T_C = 60^\circ\text{C}$	1255 A
I_{TSM}	$T_{VJ} = 125^\circ\text{C}; 10\text{ ms half sine}, V_R = 50\% V_{RRM}$	16.4 K.A.
	$T_{VJ} = 125^\circ\text{C}; 10\text{ ms half sine}, V_R = 0$	20.5 K.A.
I^2T	$T_{VJ} = 125^\circ\text{C}; 10\text{ ms half sine}, V_R = 50\% V_{RRM}$	1350000 A^2s
	$T_{VJ} = 125^\circ\text{C}; 10\text{ ms half sine}, V_R = 0$	2100000 A^2s
I_{GT}	$T_{VJ} = 25^\circ\text{C}; V_{DRM} = 5V$	200 mA
V_{GT}	$T_{VJ} = 25^\circ\text{C}; V_{DRM} = 5V$	3.5 V
dv/dt	$T_{VJ} = 125^\circ\text{C}; \text{Voltage} = 67\% V_{DRM}$	*300 $\text{V}/\mu\text{S}$
$[di/dt]_{cr}$	Repetitive 50 Hz	250 $\text{A}/\mu\text{S}$
V_T	$T_{VJ} = 25^\circ\text{C}; I_T = 2900\text{ A}$	1.875 V max
V_o	$T_{VJ} = 125^\circ\text{C}$	0.92 V
R_o	$T_{VJ} = 125^\circ\text{C}$	0.40 m
I_{RRM}/I_{DRM}	$T_{VJ} = 130^\circ\text{C}$	100 mA
I_H	$T_{VJ} = 25^\circ\text{C}; R_{6-K} =$	500 mA
I_L	$T_{VJ} = 25^\circ\text{C}; V_D = 5V$	1000 mA
$R_{th(i-c)}$	dc	0.022 $^\circ\text{C}/\text{W}$
$R_{th(i-h)}$		0.004 $^\circ\text{C}/\text{W}$
T_{vj}		125 $^\circ\text{C}$
T_{stg}		-40 to + 125 $^\circ\text{C}$
Mounting Force		20-22 KN
Case outline		F

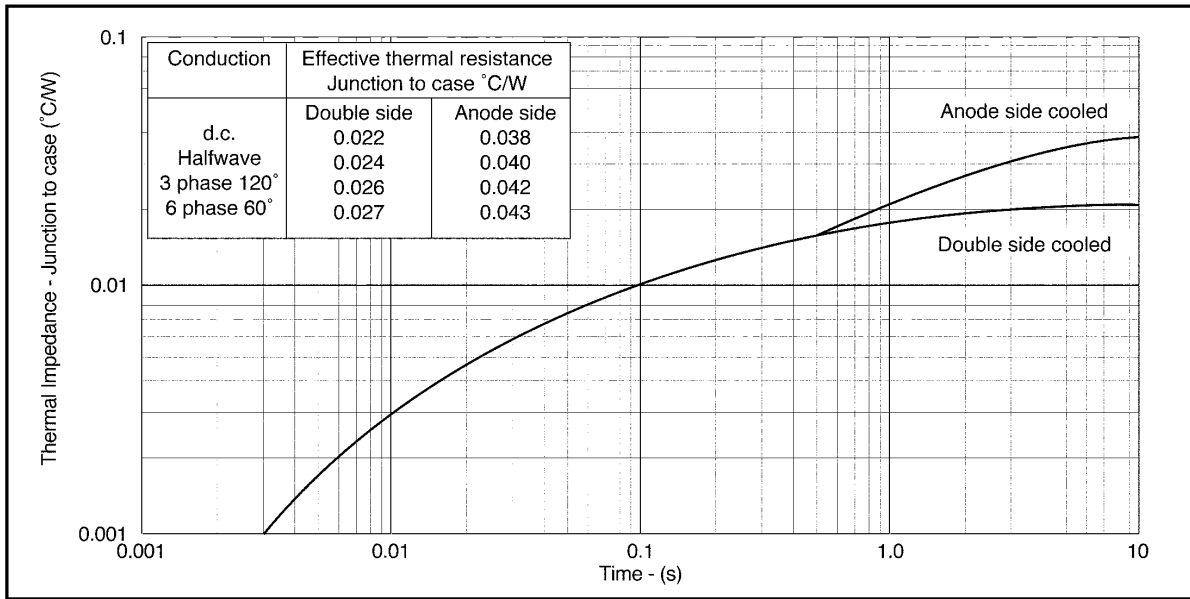
* Higher dv/dt selection available.



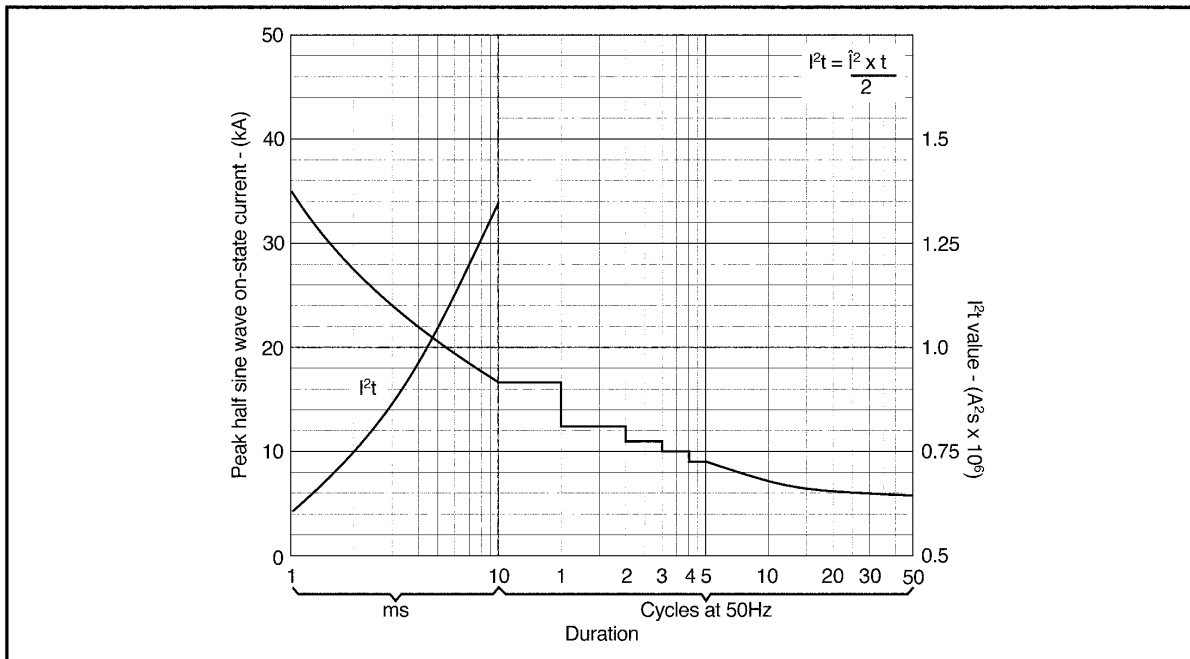
CURVES







Transient thermal impedance - junction to case - (°C/W)



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

PACKAGE DETAILS

DO NOT SCALE

