

Thyristors

DCR1476



Technical Data

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

Type No.	V_{RRM} (Volts)	V_{RSM} (Volts)
DCR1476/30	3000	3100
DCR1476/32	3200	3300
DCR1476/34	3400	3500
DCR1476/36	3600	3700
DCR1476/38	3800	3900
DCR1476/40	4000	4100
DCR1476/42	4200	4300

Features

- Double side cooling.
- Voltage grade upto 4200V
- Weight 1600 gm (Approx.)

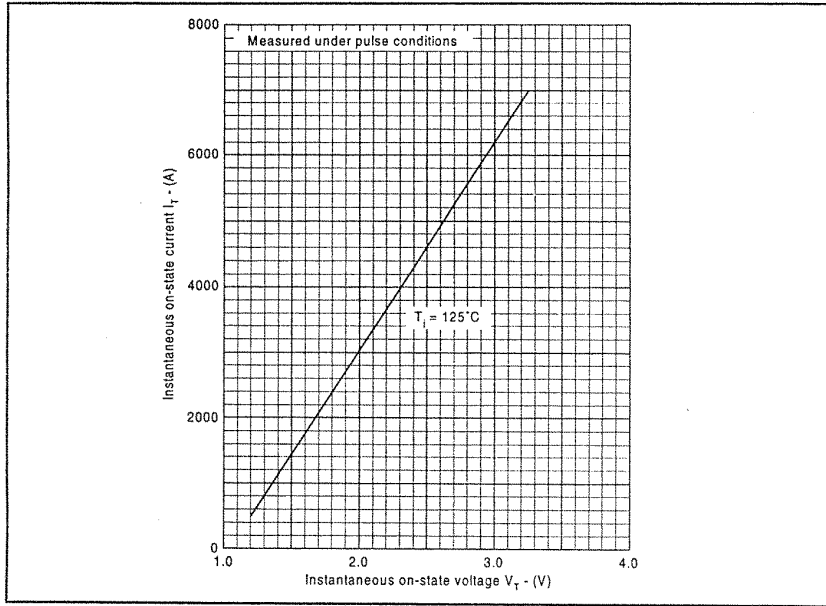
Symbol	Conditions	Values
$I_{T(AV)}$	Half wave resistive load; $T_C = 60^\circ C$	2223 A
I_{TSM}	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 50\% V_{RRM}$	29.0 KA
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	36.25 KA
I^2t	$T_{vj} = 125^\circ C$, 10 ms half sine, $V_R = 50\% V_{RRM}$	4210000 A ² s
	$T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$	6570000 A ² s
I_{GT}	$T_{vj} = 25^\circ C$; $V_{DRM} = 5V$	400 mA
V_{GT}	$T_{vj} = 25^\circ C$; $V_{DRM} = 5V$	4.0 V
dv/dt	$T_{vj} = 125^\circ C$; Voltage = 67 % V_{DRM}	*500V/ μ s
$[di/dt]_{CR}$	Repetitive 50 Hz	150 A/ μ s
V_T	$T_{vj} = 25^\circ C$; $I_T = 2900 A$	1.875 V max
V_O	$T_{vj} = 125^\circ C$	1.03 V
R_O	$T_{vj} = 125^\circ C$	0.32 m
I_{RRM}/I_{DRM}	$T_{vj} = 130^\circ C$	250 mA
I_H		500 mA
I_L		1000 mA
$R_{th(j-c)}$	dc	0.0095 $^\circ C/W$
$R_{th(c-h)}$		0.002 $^\circ C/W$
T_{vj}		+125 $^\circ C$
T_{stg}		-40....+125 $^\circ C$
Mounting Force		38-47 KN
Case outline		Y

* Higher dv/dt selection available.

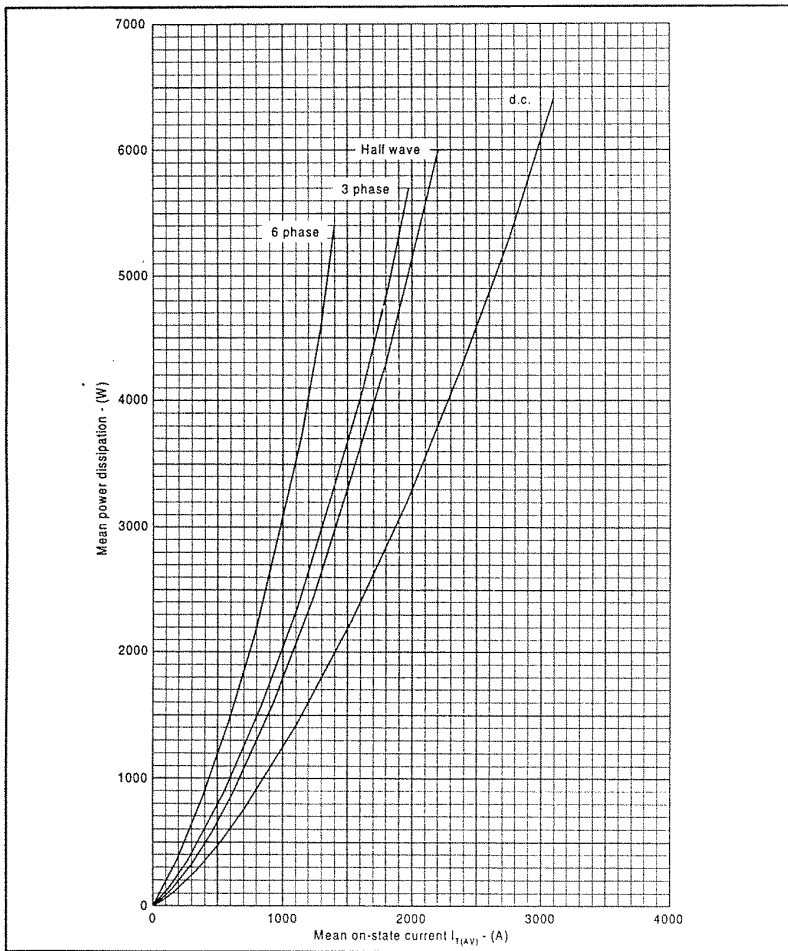


DCR1476SY

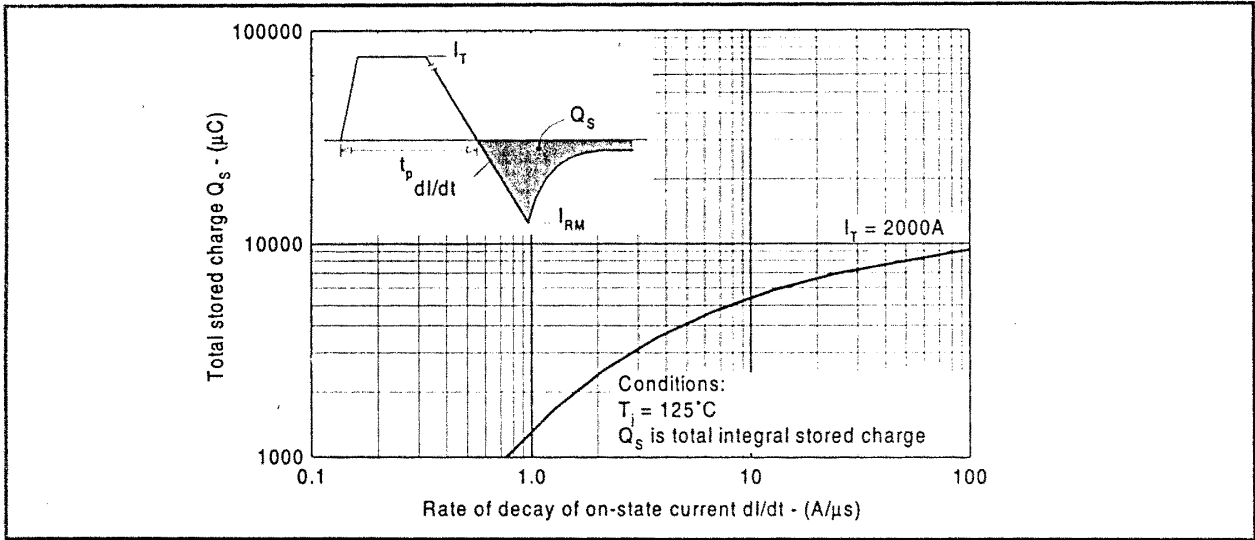
CURVES



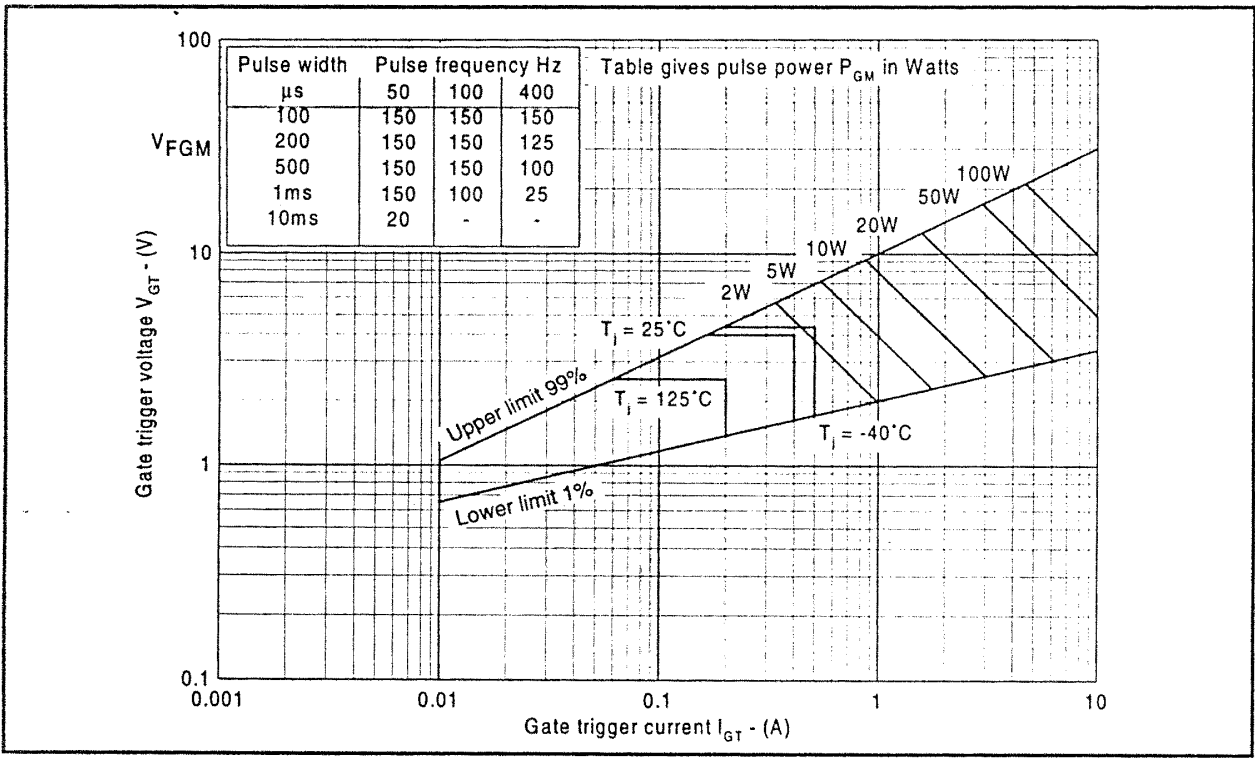
Maximum (limit) on-state characteristics



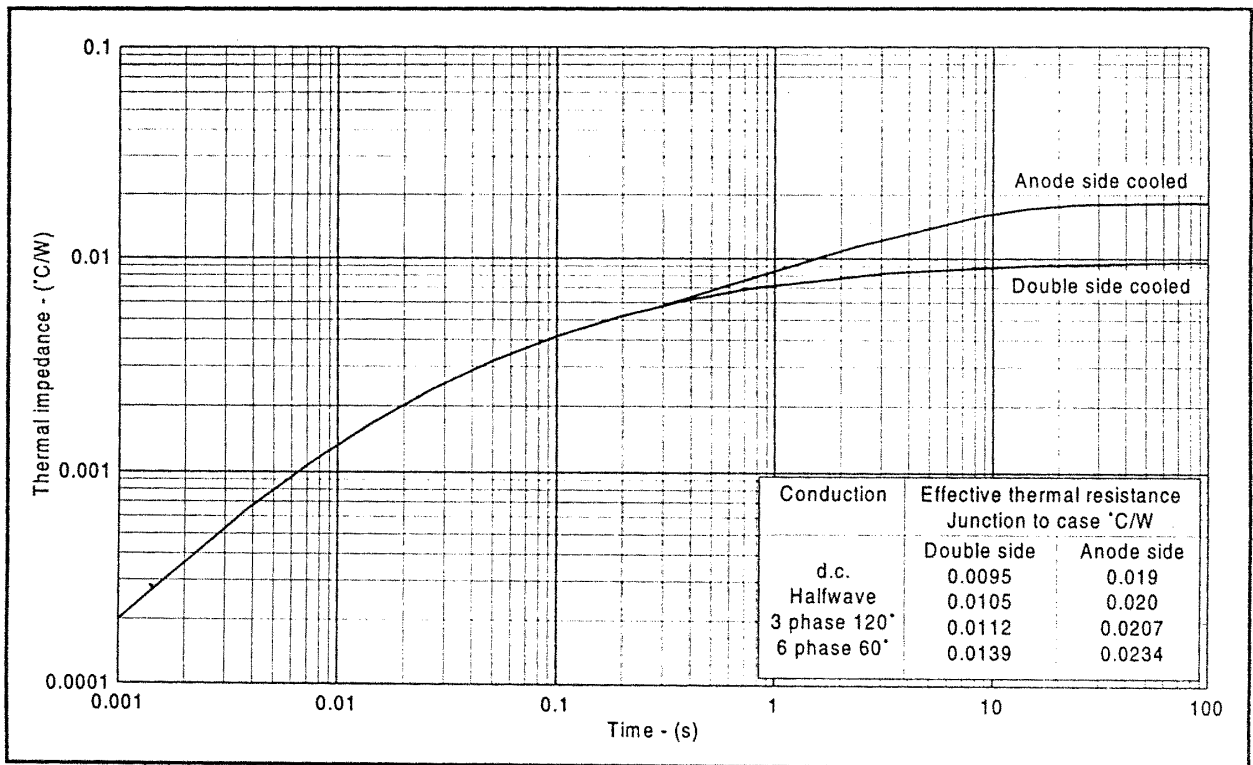
Dissipation curves



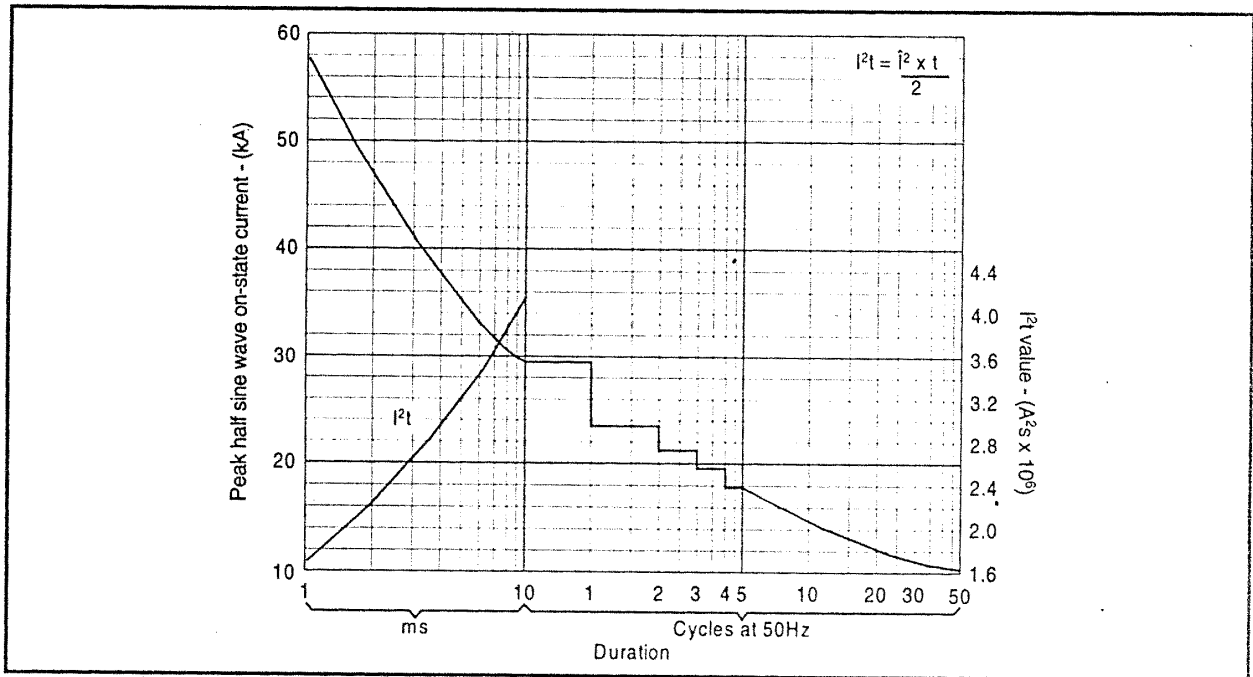
Stored charge



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°C)

PACKAGE DETAILS

DO NOT SCALE.

