

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.)

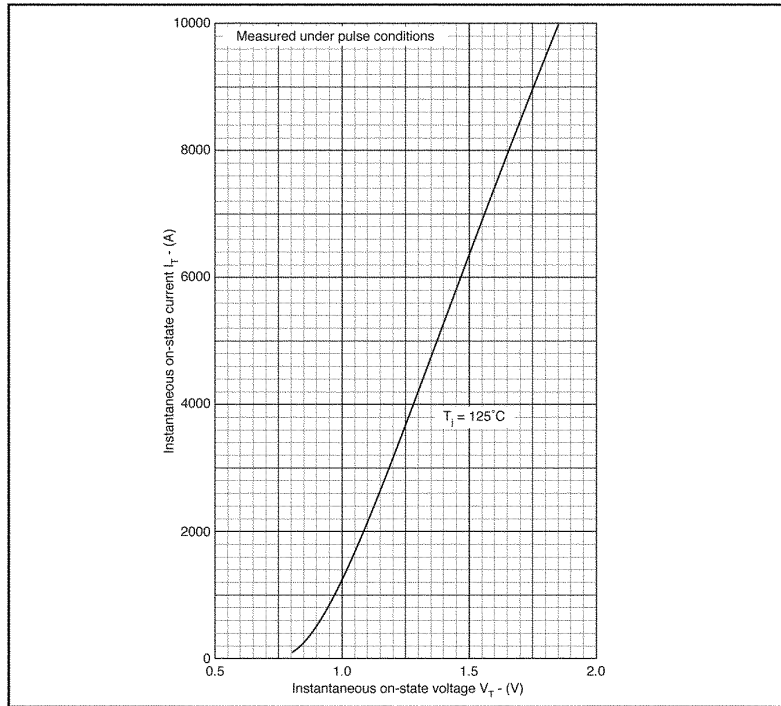
| Symbol | Conditions | Values |
|---|--|------------------------|
| $I_{T(AV)}$ | Half wave resistive load; $T_C = 60^\circ C$ | 3600 A |
| I_{TSM} | $T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 50\% V_{RRM}$ | 49.0 KA |
| | $T_{vj} = 125^\circ C$; 10 ms half sine, $V_R = 0$ | 61.2 KA |
| I^2t | $T_{vj} = 125^\circ C$, 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.

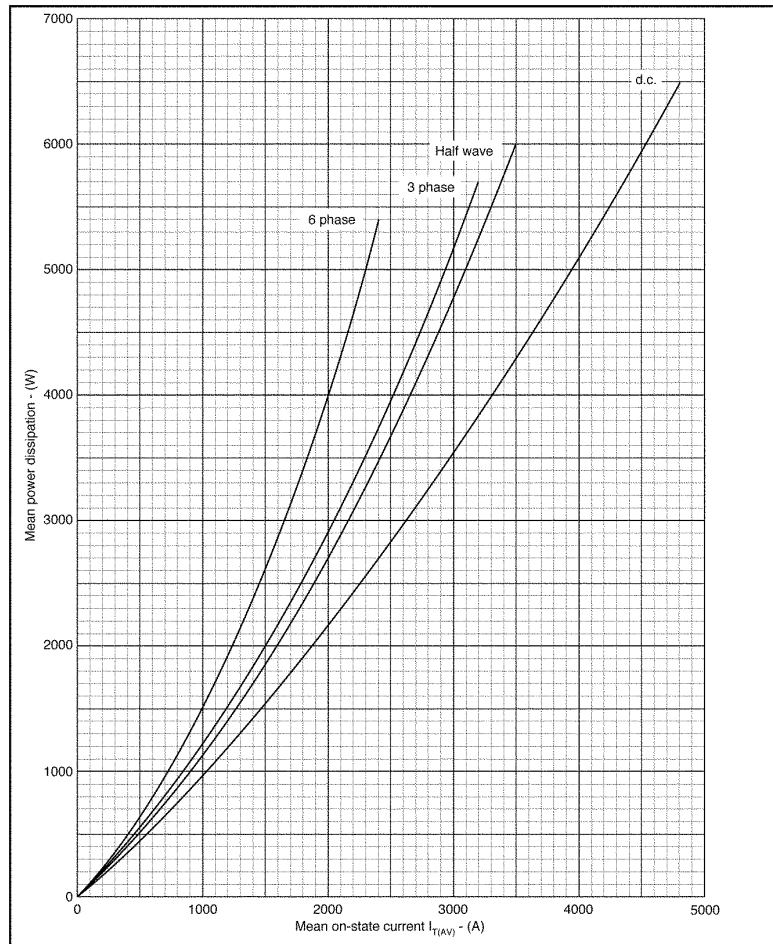


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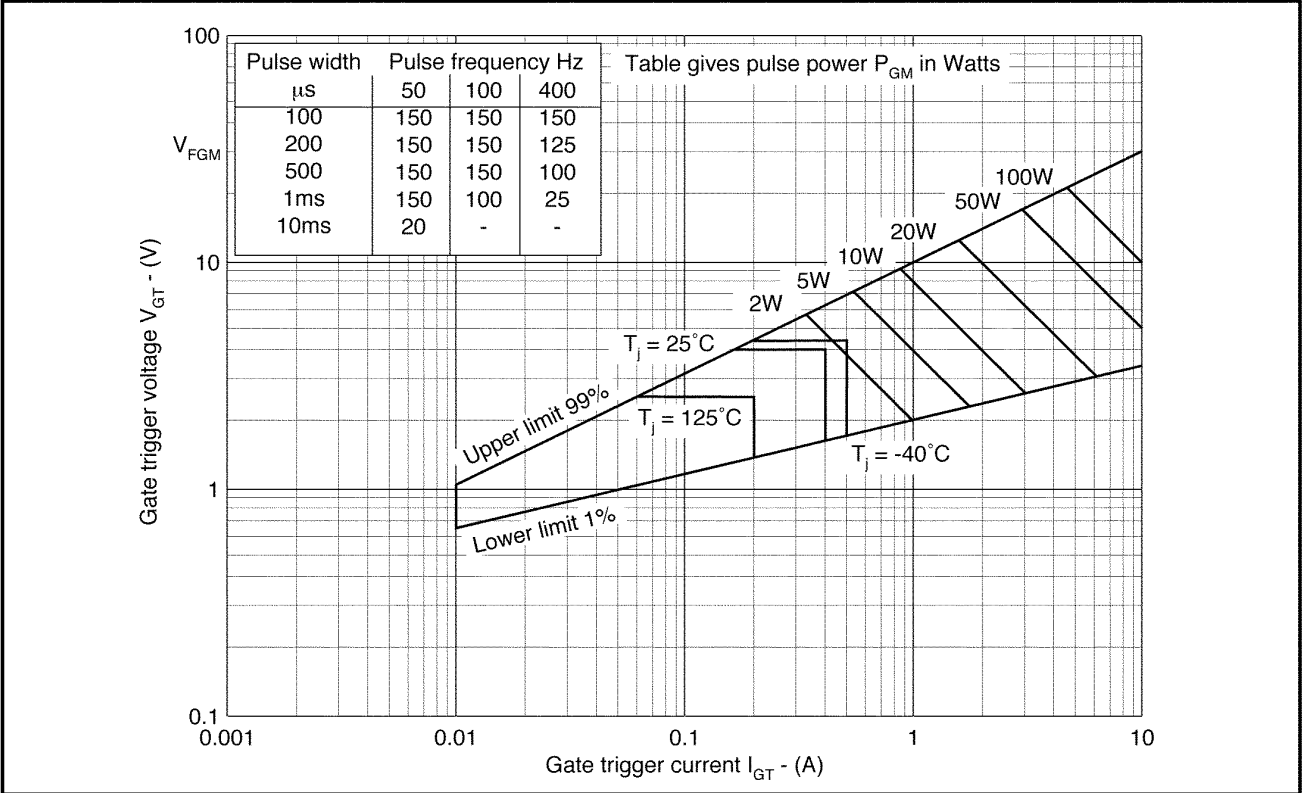
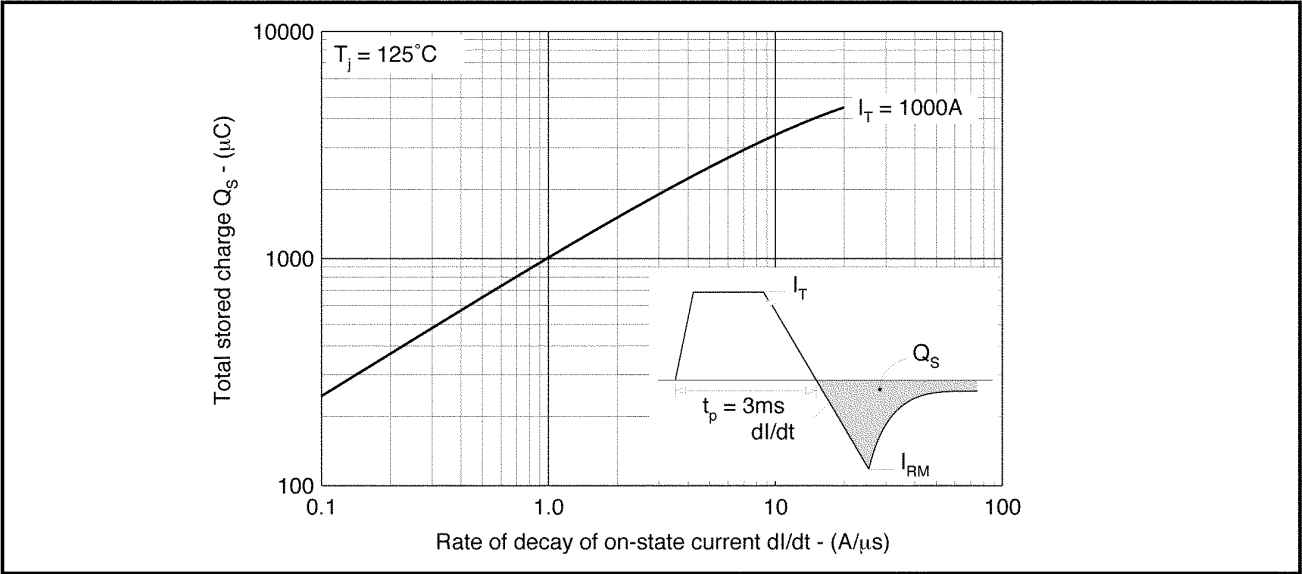
CURVES

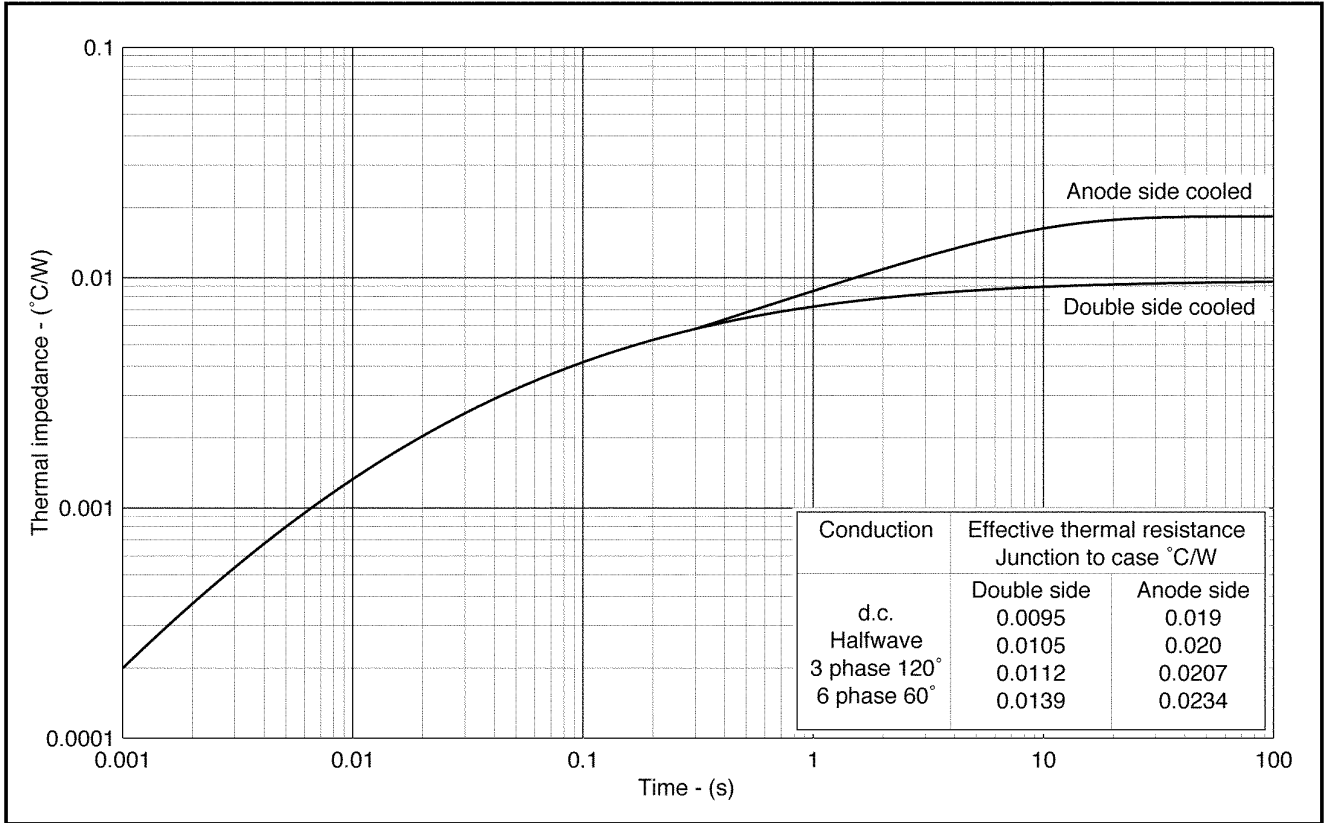


Maximum (limit) on-state characteristics

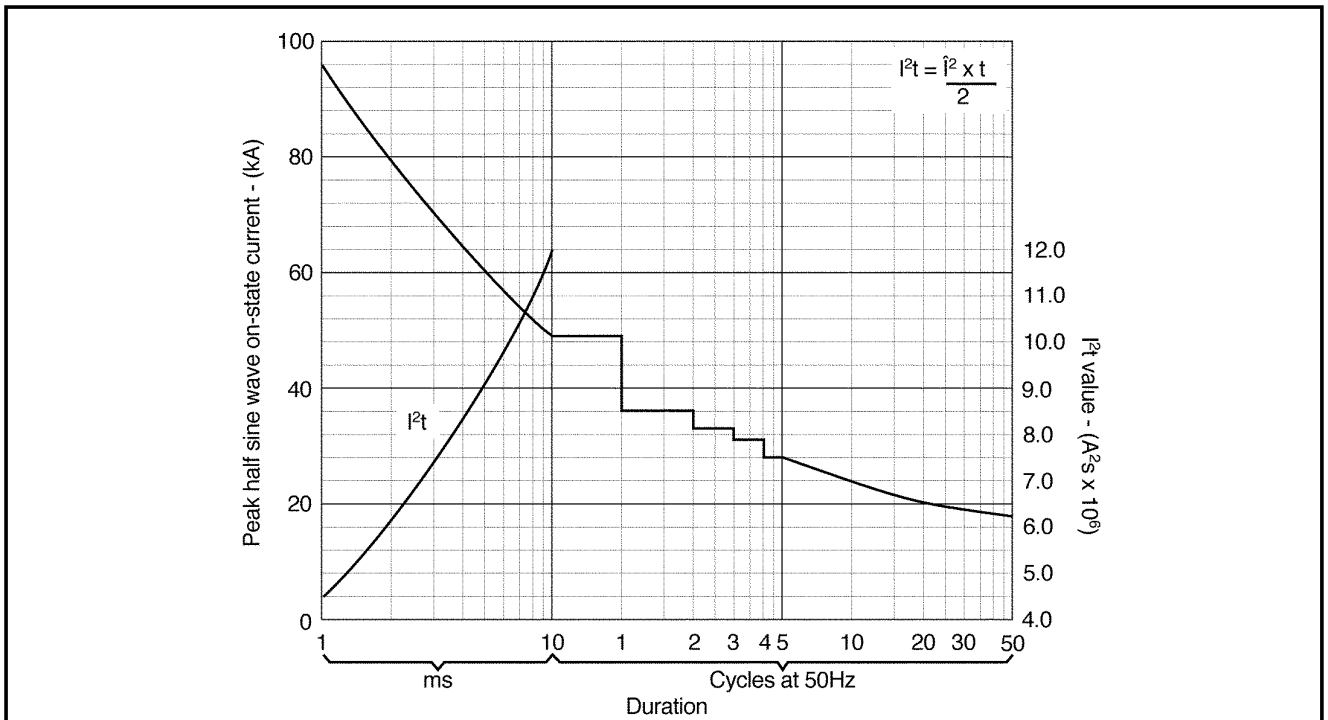


Dissipation curves





Maximum (limit) transient thermal impedance - junction to case



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

PACKAGE DETAILS

DO NOT SCALE.

