

# Rectifier Diode

## DS402



### Technical Data

Typical applications :All purpose high power rectifier diodes, Non-controllable and half controlled rectifiers . Free-wheeling diodes & welding.

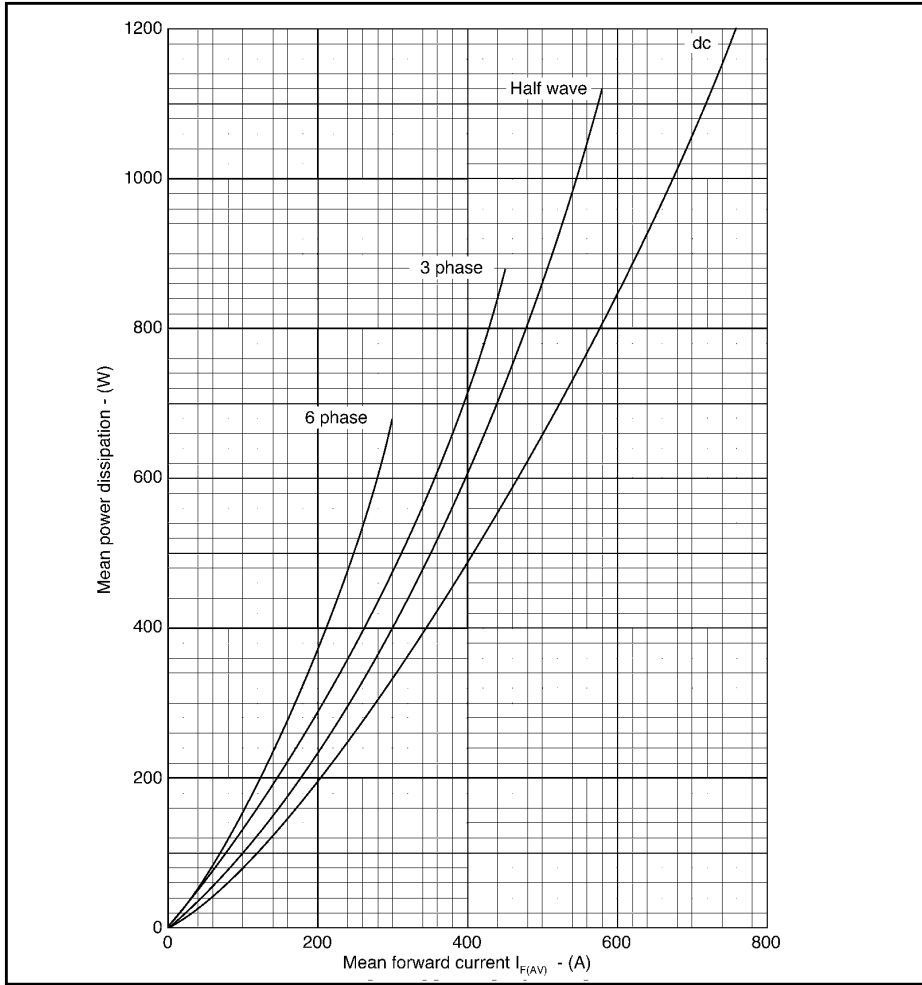
Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
DS402/04	400	500
DS402/08	800	900
DS402/12	1200	1300
DS402/14	1400	1500

### Features

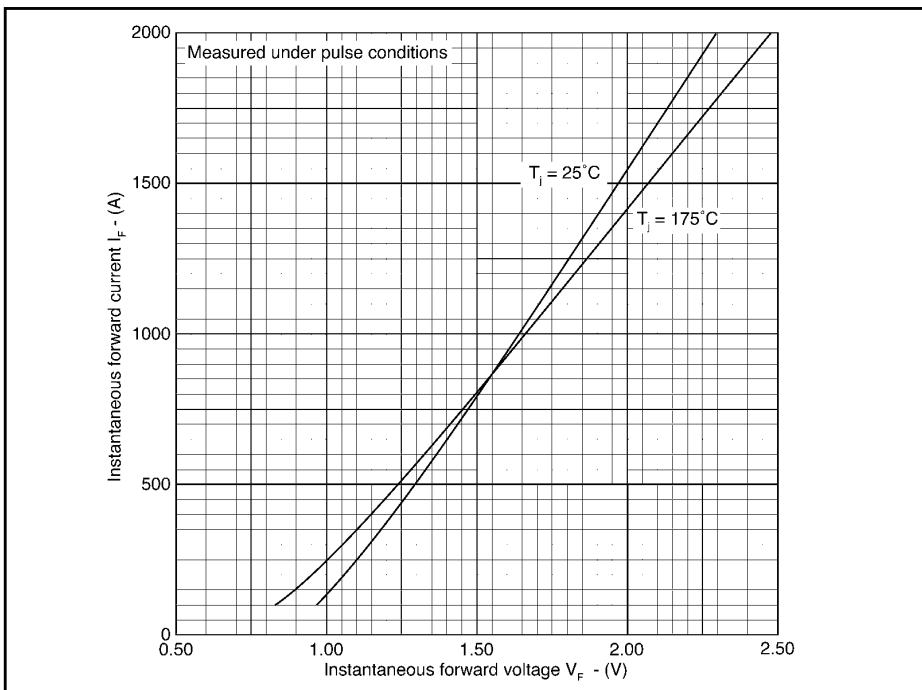
- Reverse voltage upto 1400V.
- Double side cooling.
- High surge capability.

Symbol	Conditions	Values
$I_{F(AV)}$	Sin 180 ; Tcase = 100 °C	505 A
$I_{FSM}$	Tvj = 175 °C ; 10 ms, $V_{RRM} = 50\%$	4500 KA
	Tvj = 175 °C ; 10 ms, $V_{RRM} = 0$	5600 KA
$I^2t$	Tvj = 175 °C, $V_{RRM} = 50\%$	101000 A <sup>2</sup> s
	Tvj = 175 °C, $V_{RRM} = 0$	155000 A <sup>2</sup> s
$I_{RRM}$	Tvj = 175 °C	15 mA max
$V_F$	Tvj = 25 °C ; $I_F = 450 A$	1.25 V max
$V_0$	Tvj = 175 °C	0.81 V
$R_0$	Tvj = 175 °C	0.84 m
$R_{th(j-c)}$		0.08 °C/W
$R_{th(c-h)}$		0.02 °C/W
$T_{vj}$		175 °C
$T_{stg}$		-40.....+ 200 °C
Mounting Force	SI units	4-5.5 KN
Weight	Approx	50 g
Case outline		T

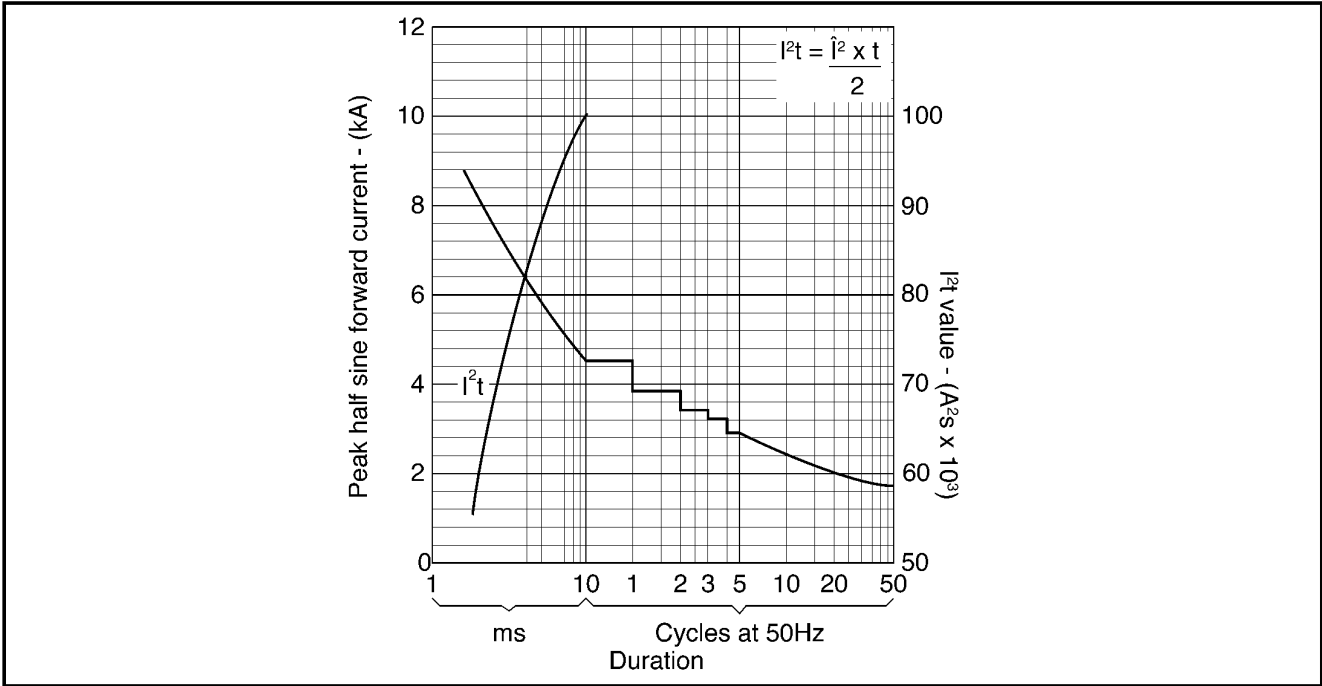




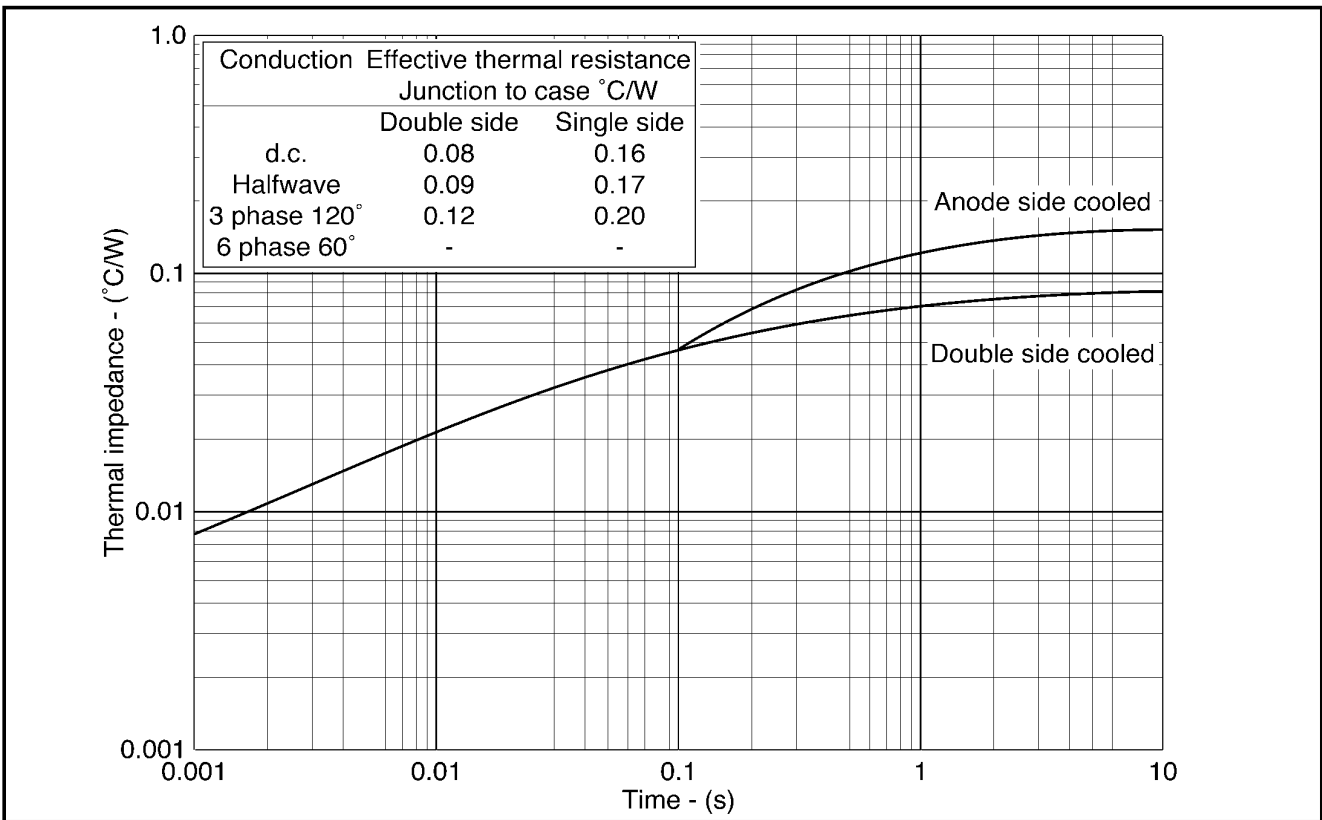
Dissipation curves



Maximum (limit) forward characteristics



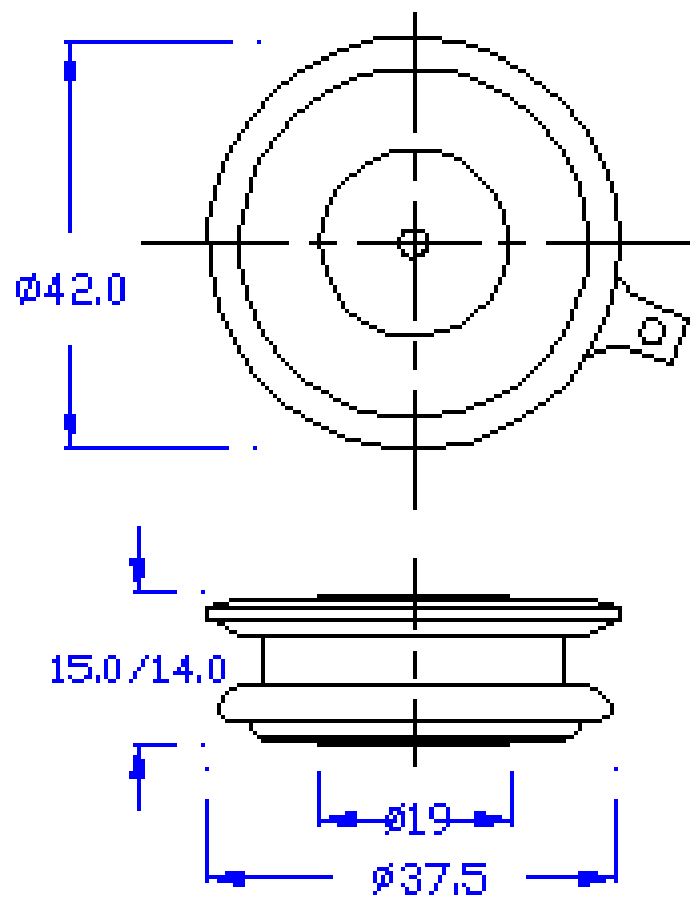
Surge (non-repetitive) forward current vs time (with 50%  $V_{RRM}$ ,  $T_{case} = 175^\circ C$ )



Transient thermal impedance - junction to case - ( $^\circ C/W$ )

PACAKAGE DEATILS

DO NOT SCALE



Nominal Weight : 50g  
Clamping Force : 4-5.5KN

All Dimensions in mm

Package Outline :T