

# Rectifier Diode

## DS2002



### Technical Data

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

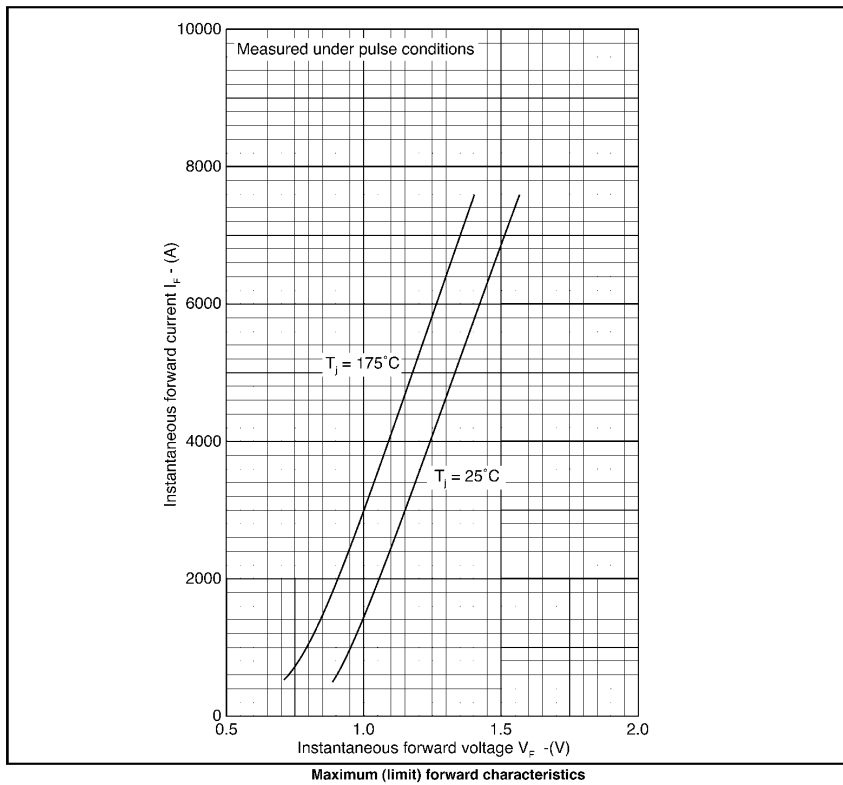
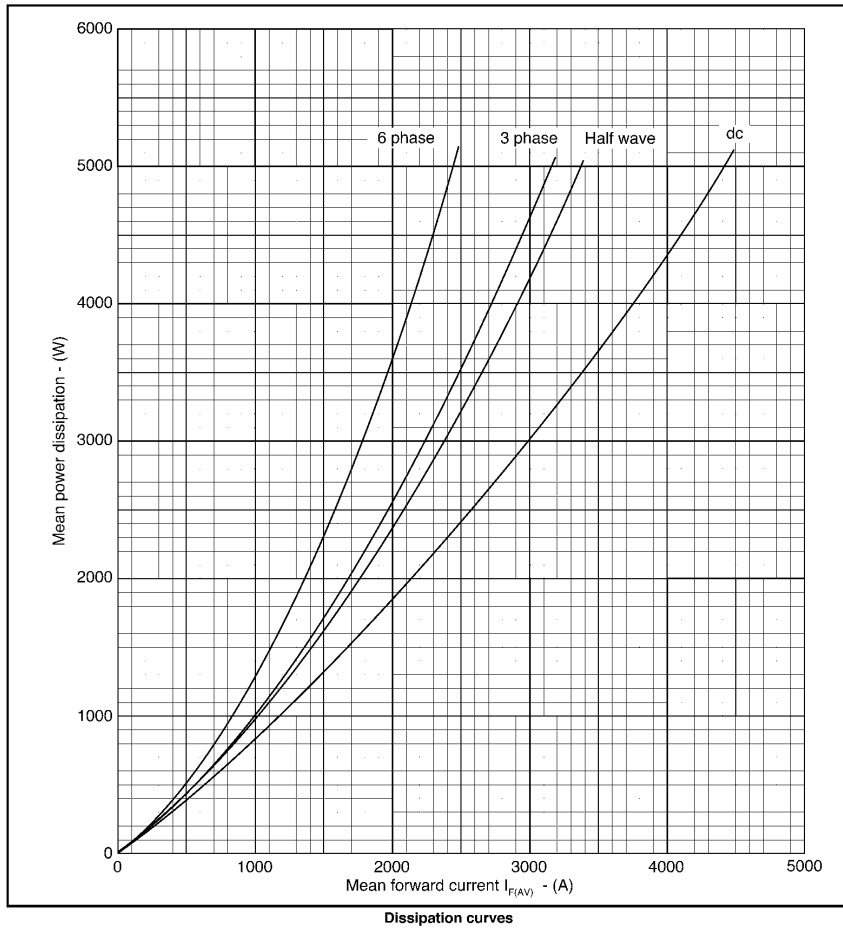
Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
DS2002/04	400	500
DS2002/08	800	900
DS2002/12	1200	1300
DS2002/18	1800	1900

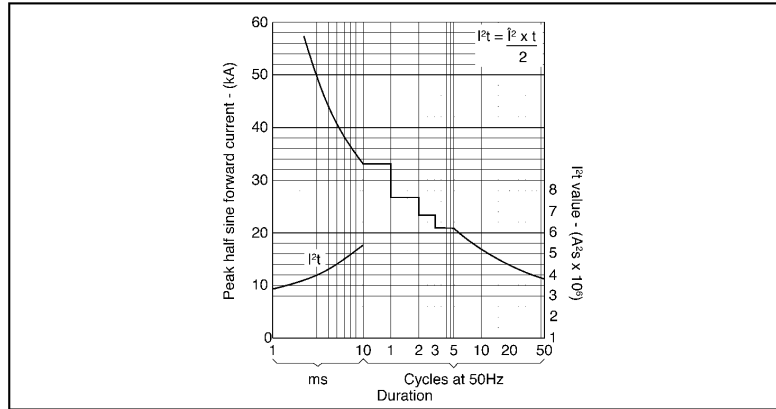
### Features

- Reverse voltage upto 1800V.
- Double side cooling.
- High surge capability.

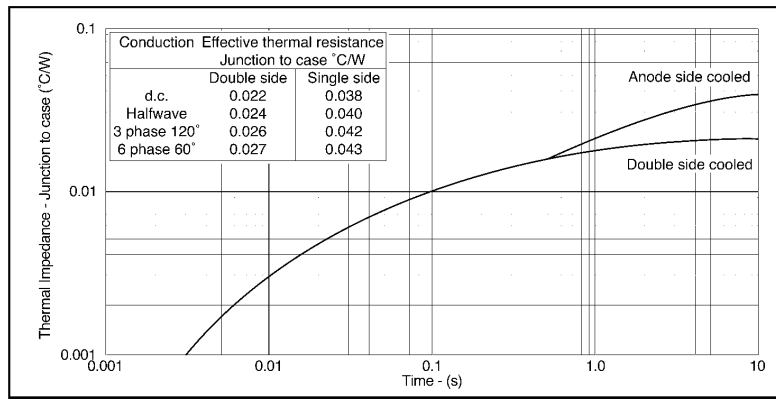
Symbol	Conditions	Values
$I_{F(AV)}$	Sin 180 ; Tcase = 100 °C	2320 A
$I_{FSM}$	Tvj = 175 °C ; 10 ms, $V_{RRM} = 50\%$	33 KA
	Tvj = 175 °C ; 10 ms, $V_{RRM} = 0$	41.25 KA
$I^2t$	Tvj = 175 °C, $V_{RRM} = 50\%$	5440000 A <sup>2</sup> s
	Tvj = 175 °C, $V_{RRM} = 0$	8500000 A <sup>2</sup> s
$I_{RRM}$	Tvj = 175 °C	50 mA max
$V_F$	Tvj = 25 °C ; $I_F = 3400 A$	1.18 V max
$V_0$	Tvj = 175 °C	0.74 V
$R_0$	Tvj = 175 °C	0.088 m
$R_{th(j-c)}$		0.022 °C/W
$R_{th(c-h)}$		0.004 °C/W
$T_{vj}$		175 °C
$T_{stg}$		-40.....+ 200 °C
Mounting Force	SI units	20-22 KN
Weight	Approx	500 g
Case outline		F



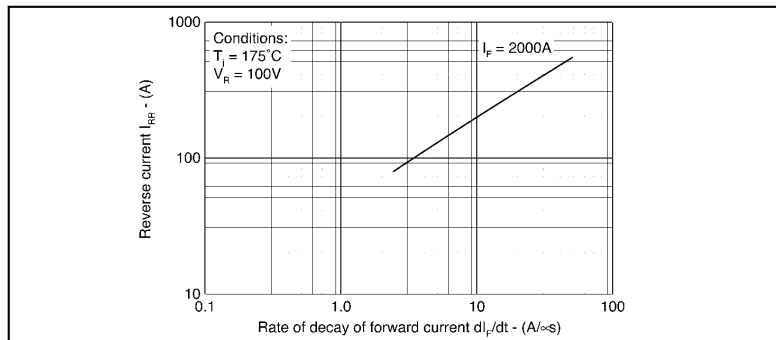




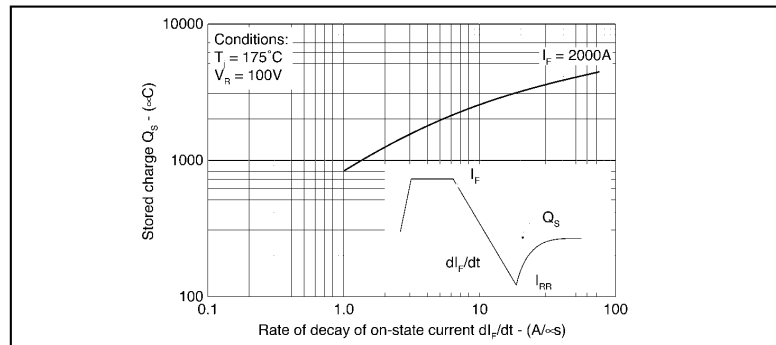
Surge (non-repetitive) forward current vs time (with 50%  $V_{RRM}$ ,  $T_{case} = 175^\circ\text{C}$ )



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



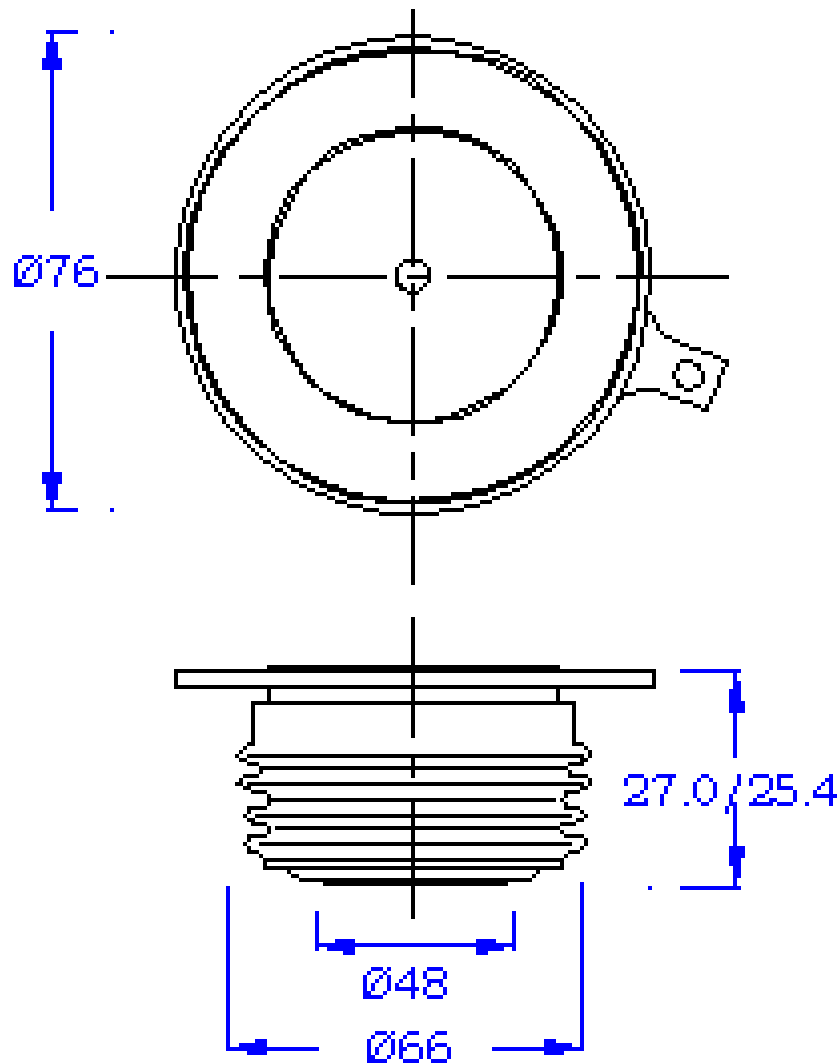
Maximum reverse recovery current



Maximum total stored charge

PACAKAGE DEATILS

DO NOT SCALE



Nominal Weight : 500g  
Clamping Force : 20-22KN

All Dimensions in mm

Package Outline : F