

# Rectifier Diode

## DS912



### Technical Data

Typical applications :All purpose power rectifier diodes, Non-controllable rectifiers . Free-wheeling diodes, welding & Traction.

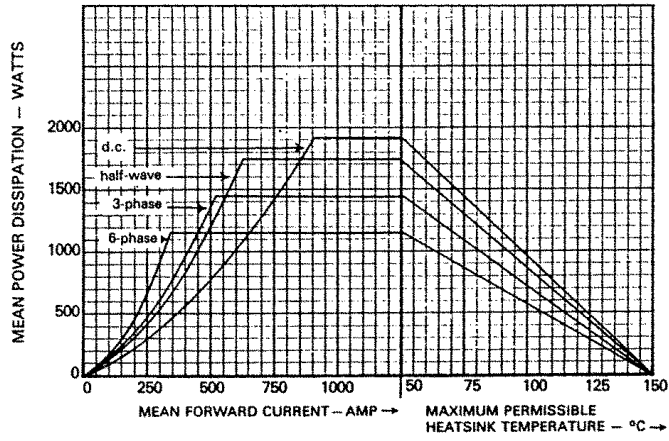
Type No.	$V_{RRM}$ (Volts)	$V_{RSM}$ (Volts)
DS912/36	3600	3700
DS912/40	4000	4100
DS912/44	4400	4500
DS912/48	4800	4900
DS912/56	5600	5700

### Features

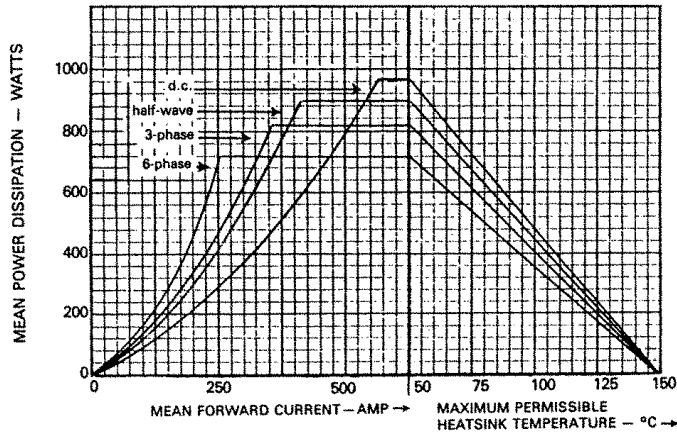
- Reverse voltage upto 5600V.
- Double side cooling.
- High surge capability.

Symbol	Conditions	Values
$I_{F(AV)}$	Sin 180 ; Tcase = 100 °C	600 A
$I_{FSM}$	Tvj = 150 °C ; 10 ms, $V_{RRM} = 50\%$	5.6 KA
$I^2t$	Tvj = 150 °C, 10 ms	157000 A <sup>2</sup> s
	Tvj = 150 °C, 3 ms	101000 A <sup>2</sup> s
$I_{RRM}$	Tvj = 150 °C	50 mA max
$V_F$	Tvj = 25 °C ; $I_F = 1200 A$	2.1 V max
$R_{th(j-h)}$	d,c	0.052 °C/W
	half wave	0.058 °C/W
	3 phase	0.068 °C/W
$T_{vj}$		150 °C
$T_{stg}$		-40.....+ 175 °C
Mounting Force	SI units	12.5-15 KN
Weight	Approx	300 g
Case outline		G

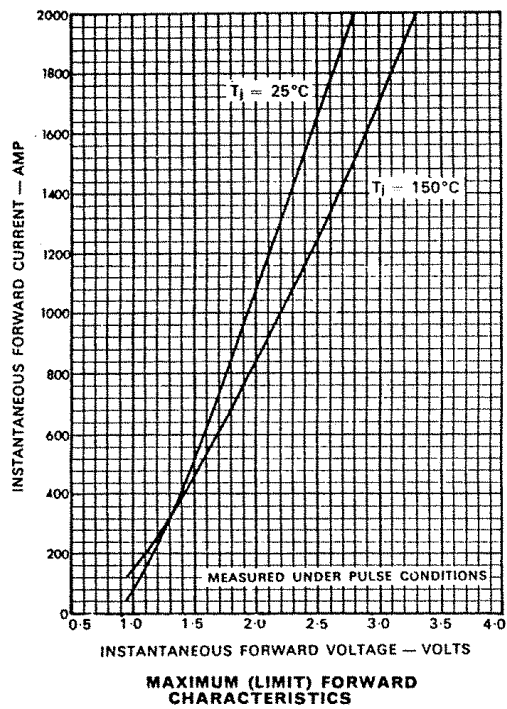


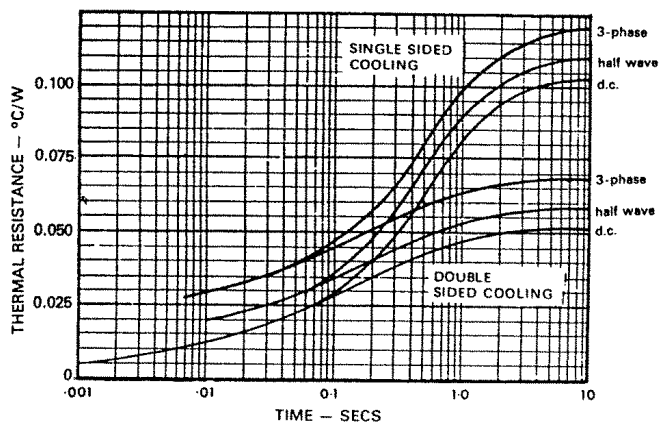


DISSIPATION CURVES:  
DOUBLE SIDE COOLED

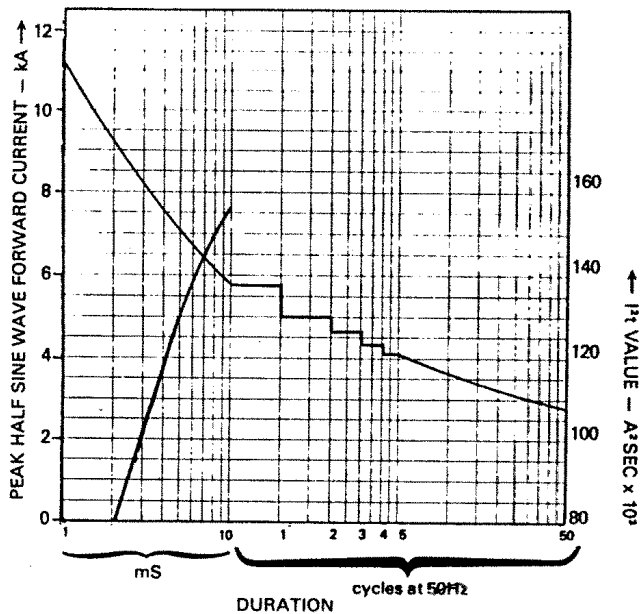


DISSIPATION CURVES:  
SINGLE SIDE COOLED



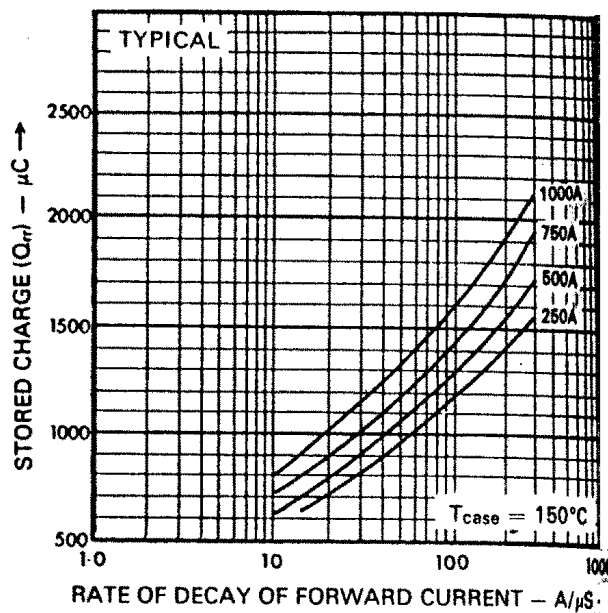


MAXIMUM (LIMIT) TRANSIENT THERMAL RESISTANCE



**SURGE (NON-REPETITIVE)  
FORWARD CURRENT versus TIME**  
(with 50% V<sub>RRM</sub> T<sub>case</sub> = 150°C)

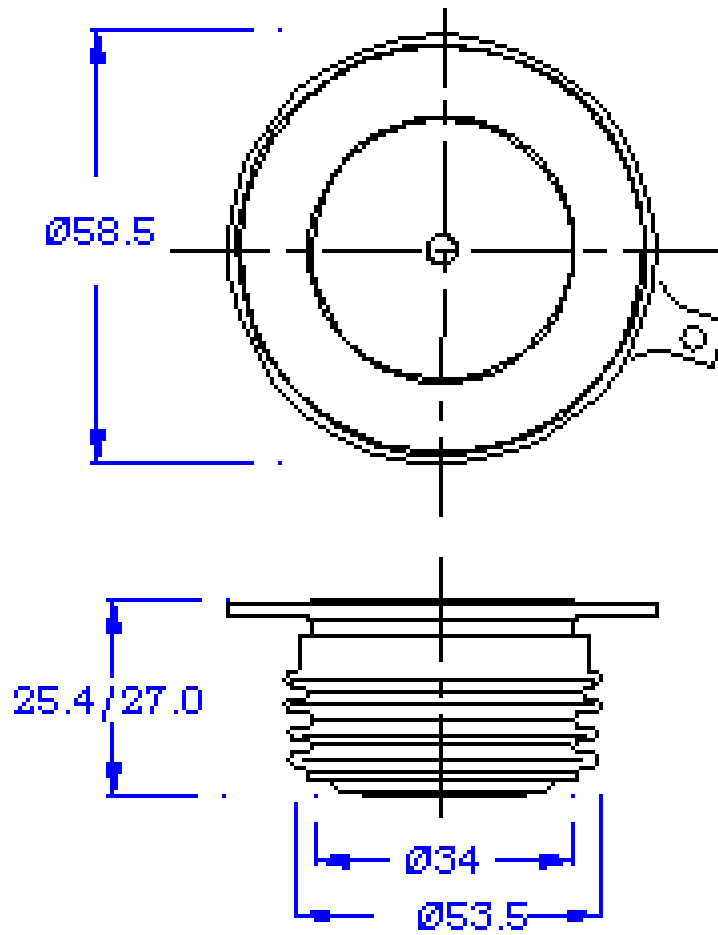
$$I^2t = \frac{A^2}{2} \times t$$



STORED CHARGE

PACAKAGE DEATILS

DO NOT SCALE



Nominal Weight : 300g  
Clamping Force : 12.5-15KN

All Dimensions in mm

Package Outline : G