

# Three Phase Diode Bridges

## MDS50

### Key Parameters

$I_D$	=	50	A
$V_{RRM}$	=		
$I^2t$	=	2.8	kA <sup>2</sup> s
$V_{FO}$	=	0.80	V

### Typical Application

- Inversion welder, current charging DC power supply
- Excitation source for DC motor, input rectifying of switching power supply
- Charging of soft starting capacitor, electric towage and auxiliary current
- DC power supply of appliance and device, input rectifying power supply of PWM frequency transformer

### MAXIMUM ALLOWABLE RATINGS

Symbols and parameters		Maximum Limits	Unit
$I_D$	Direct output current	50	A
$V_{RRM}$	Max. repetitive peak reverse blocking voltage	600-2000	V
$I_{RRM}$	Maximum repetitive peak reverse current	8	mA
$I_{FSM}$	Surge peak forward current	0.75	kA
$I^2t$	Safety factor	2.8	kA <sup>2</sup> s
$V_{FO}$	Threshold voltage	0.80	V
$r_F$	Slope resistance	9.0	mΩ
$V_{FM}$	Peak on-state voltage	1.55	V
$R_{th(j-c)}$	Thermal resistance, node to shell	0.20	°C/W
$R_{th(c-h)}$	Thermal resistance, shell to powder	0.15	°C/W



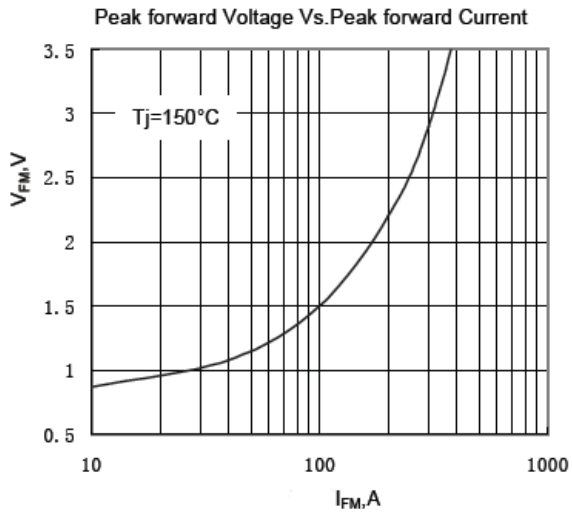


Fig.1

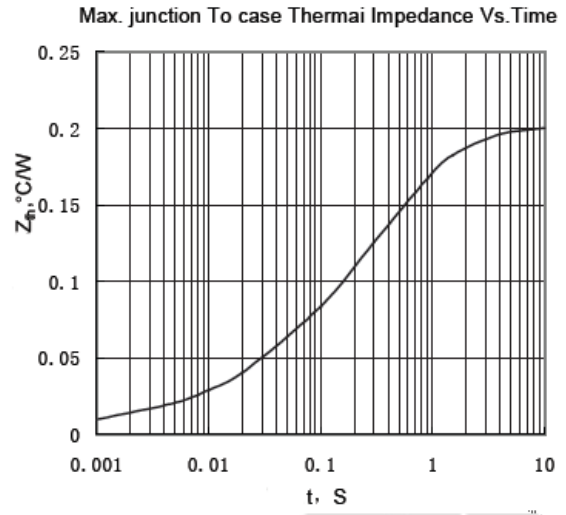


Fig.2

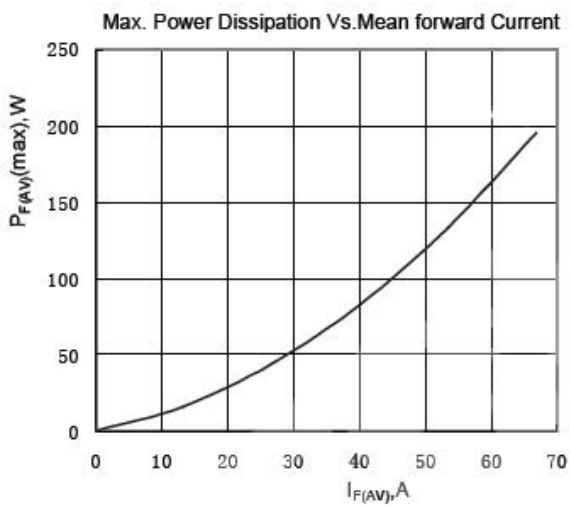


Fig.3

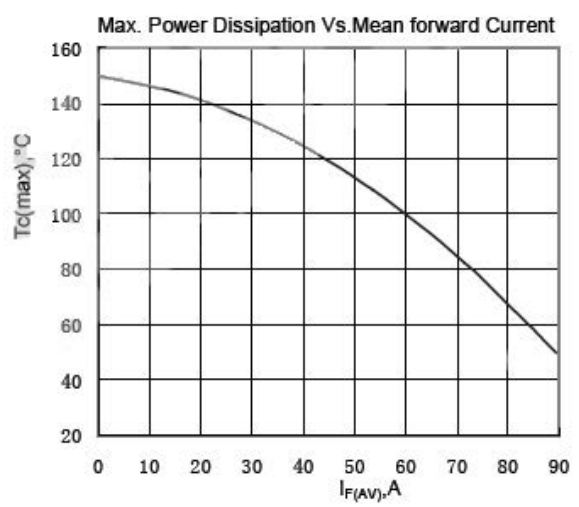


Fig.4

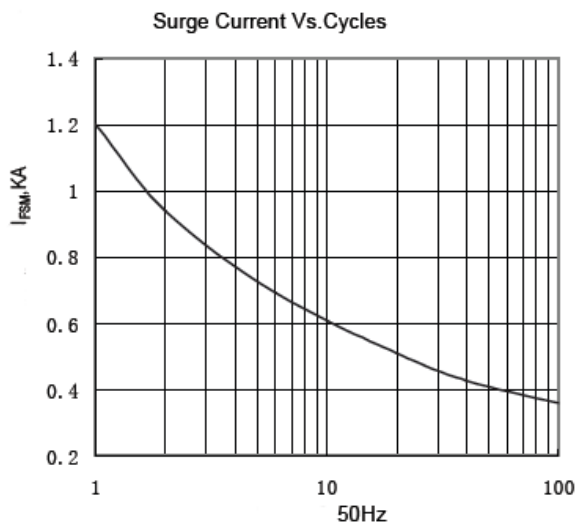


Fig.5

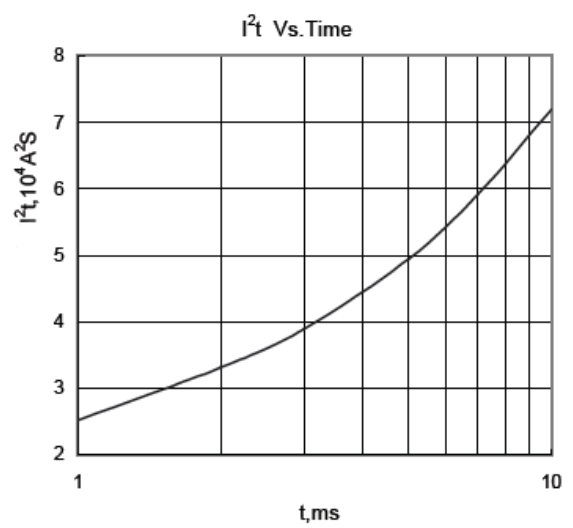


Fig.6