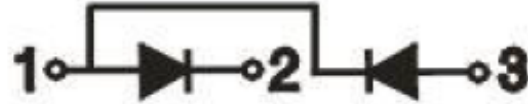


MRS400.36-413F3

Diodes module

Features:

- Isolated mounting base 4000V~
- Pressure contact technology with increased power cycling capability
- Space and weight savings



Typical applications:

- AC/DC motor drives
- Various rectifiers
- DC supply for PWM inverter

Symbol	Characteristics	Test Conditions	Value			Unit
			Min	Typ	Max	
$V_{RSM/DSM}$	Non-repetitive reverse/forward blocking voltage	$T_j = 150^\circ\text{C}$			3700	V
$V_{RRM/DRM}$	Repetitive reverse/forward blocking voltage	$T_j = 150^\circ\text{C}$			3600	V
$I_{F(AV)}$	Forward average current	180° half sine wave 50Hz $T_c = 100^\circ\text{C}$			400	A
$I_{F(RMS)}$	Forward square root current	180° half sine wave 50Hz $T_c = 100^\circ\text{C}$			628	A
I_{RRM}	Repetitive peak current	at V_{DRM}/V_{RRM} $T_j = 150^\circ\text{C}$			50	mA
I_{FSM}	Forward surge current	10ms half sine wave $V_R = 60\% V_{RRM}$ $T_j = 150^\circ\text{C}$			13	kA
$I^2 t$	$I^2 t$ for fusing coordination	$T_j = 150^\circ\text{C}$			845	kA^2s
V_{FO}	Threshold voltage	$T_j = 150^\circ\text{C}$			0.95	V
r_F	Forward slope resistance	$T_j = 150^\circ\text{C}$			0.72	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$T_j = 25^\circ\text{C}$; $I_{FM} = 1200\text{A}$			1.82	V
$R_{th(j-c)}$	Thermal resistance junction to case	Single side cooled per chip			0.075	$^\circ\text{C}/\text{W}$
$R_{th(c-s)}$	Thermal resistance case to sink	Single side cooled per chip			0.024	$^\circ\text{C}/\text{W}$
V_{ISO}	Isolation voltage	50Hz, RMS, $t = 1\text{min}$, $I_{ISO} : 1\text{mA (MAX)}$	4000			V
F_M	Mounting torque - copper plate (M6)		4.5		6.0	N·m
	Mounting torque - terminal (M10)		10		12	N·m
T_{stg}	Storage Temperature		-40		150	$^\circ\text{C}$
T_j	Operating Temperature		-40		150	$^\circ\text{C}$
W_t	Weight			1540		g
Outline	416F3					

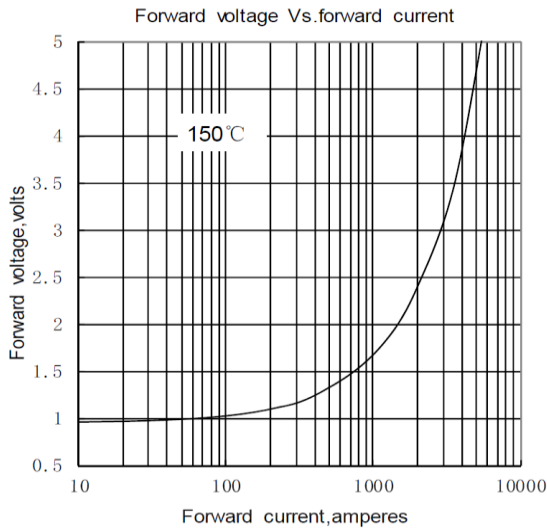


Fig.1

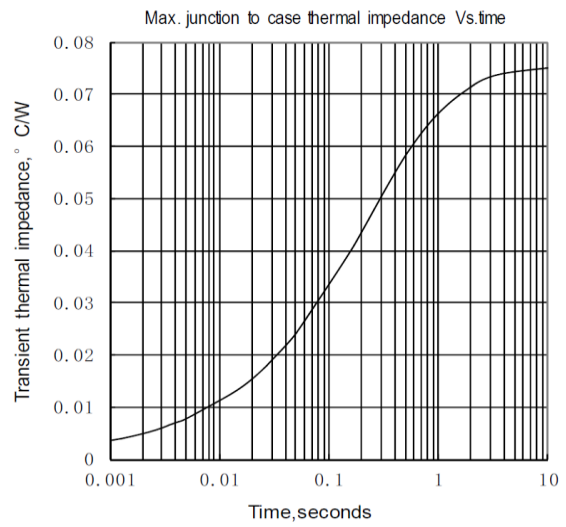


Fig.2

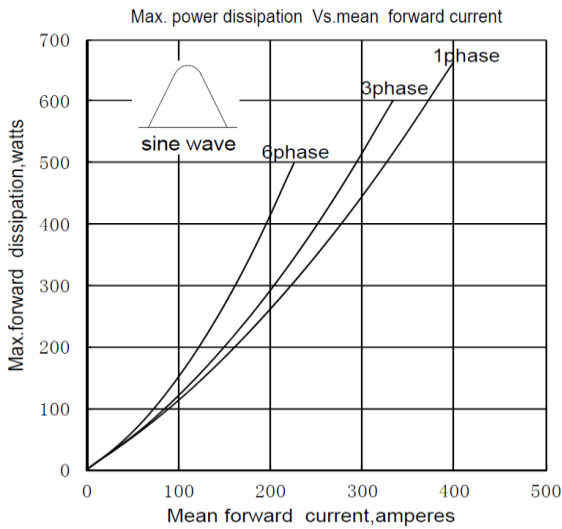


Fig.3

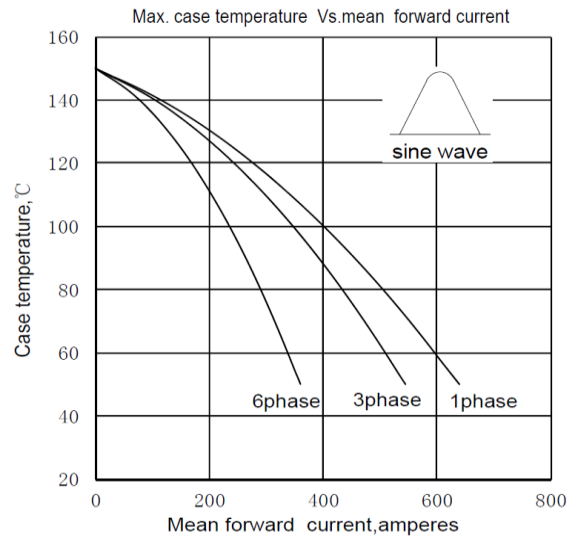


Fig.4

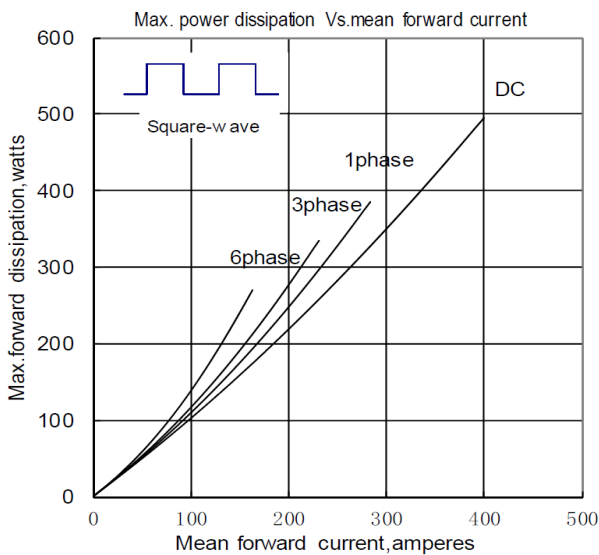


Fig.5

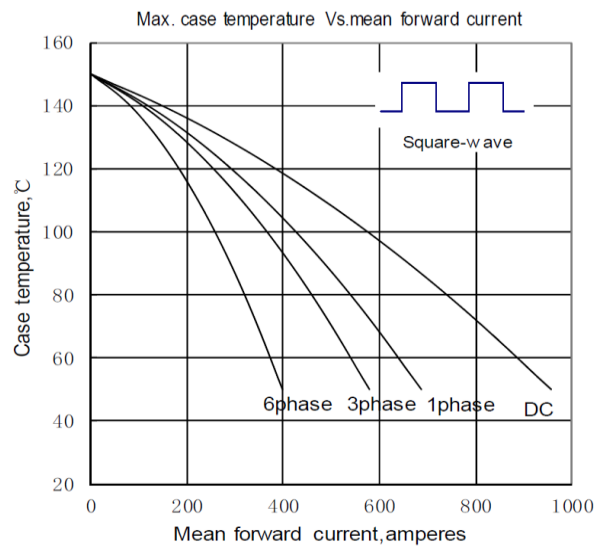


Fig.6

MRS400.36-413F3

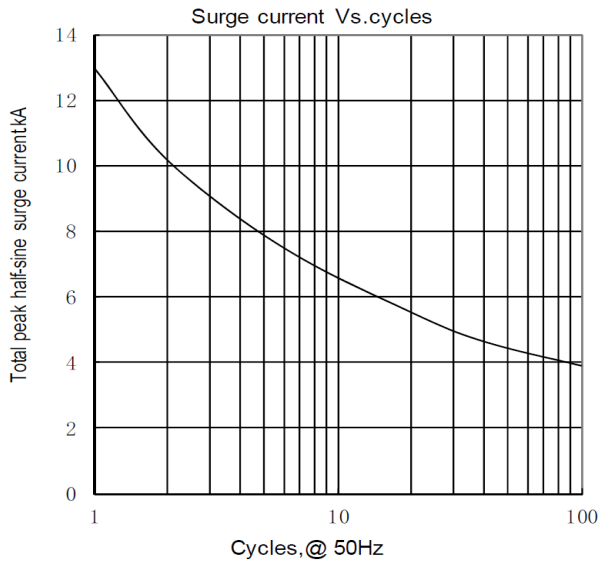


Fig.7

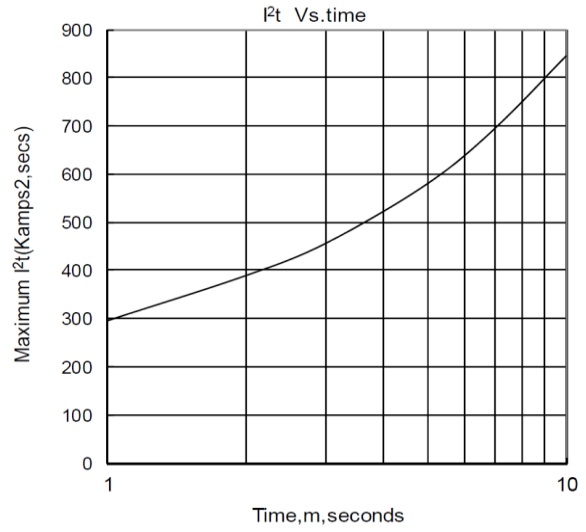
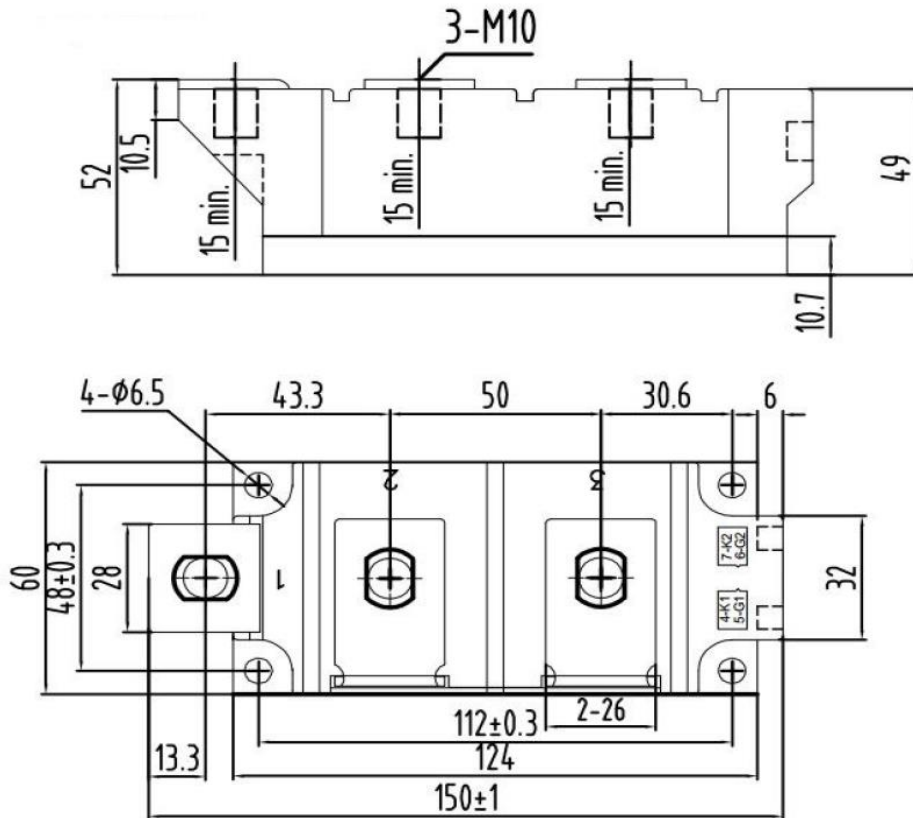


Fig.8

Outline:



(dimensions in mm)

S.CO.M.E.S. Srl

Via Enrico Mattei, 6/8 - 26283 - Castiglione d'Adda (LO) - Italy

Phone: +39 0377 901243 Fax: +39 0377 900206

Scomes Srl reserves the right to change any specification without notice