

MRS700.26

Diodes module

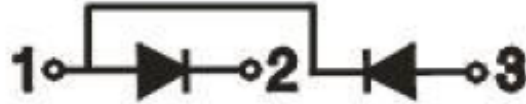
Features:

- Isolated mounting base 3000V~
- Pressure contact technology with increased power cycling capability
- Space and weight savings



Typical applications:

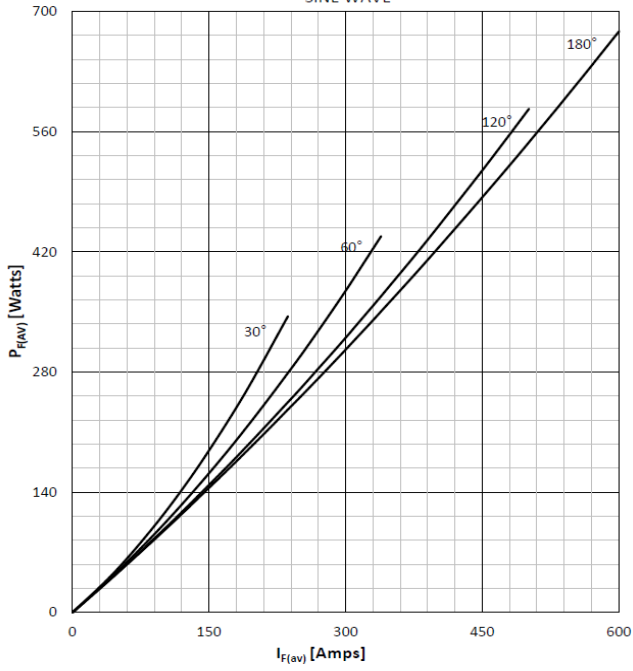
- AC/DC motor drives
- Various rectifiers
- DC supply for PWM inverter



Symbol	Characteristics	Test Conditions	Value			Unit
			Min	Typ	Max	
$V_{RSM/DSM}$	Non-repetitive reverse/forward blocking voltage	$T_j = 150^\circ\text{C}$			2700	V
$V_{RRM/DRM}$	Repetitive reverse/forward blocking voltage	$T_j = 150^\circ\text{C}$			2600	V
$I_{F(AV)}$	Forward average current	180° half sine wave 50Hz $T_c = 85^\circ\text{C}$			720	A
$I_{F(RMS)}$	Forward square root current	180° half sine wave 50Hz $T_c = 106^\circ\text{C}$			595	A
I_{RRM} I_{DRM}	Repetitive peak current	at V_{DRM}/V_{RRM} $T_j = 150^\circ\text{C}$			40	mA
I_{FSM}	Forward surge current	10ms half sine wave without reverse voltage $T_j = 150^\circ\text{C}$			29	kA
$I^2 t$	$I^2 t$ for fusing coordination	$T_j = 150^\circ\text{C}$			4205	kA^2s
V_{FO}	Threshold voltage	$T_j = 150^\circ\text{C}$			0.914	V
r_F	Forward slope resistance	$T_j = 150^\circ\text{C}$			0.145	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$T = 25^\circ\text{C}$; $I_F = 1500\text{A}$			1.18	V
$R_{th(j-c)}$	Thermal resistance junction to case	Single side cooled per chip			0.065	$^\circ\text{C}/\text{W}$
$R_{th(c-s)}$	Thermal resistance case to sink	Single side cooled per chip			0.020	$^\circ\text{C}/\text{W}$
V_{ISO}	Isolation voltage	50Hz, RMS, $t = 1\text{min}$, $I_{ISO} : 1\text{mA (MAX)}$	3000			V
F_M	Mounting torque - copper plate (M6)			6.0		N·m
	Mounting torque - terminal (M10)			12.0		N·m
T_{stg}	Storage Temperature		-40		150	$^\circ\text{C}$
T_j	Operating Temperature		-40		150	$^\circ\text{C}$
W_t	Weight			1480		g
Outline	M90					

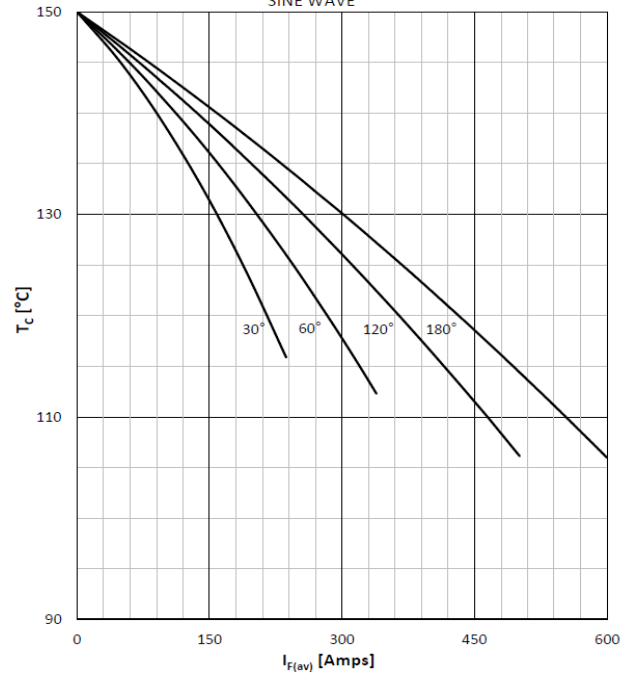
DISSIPATION CHARACTERISTICS

SINE WAVE



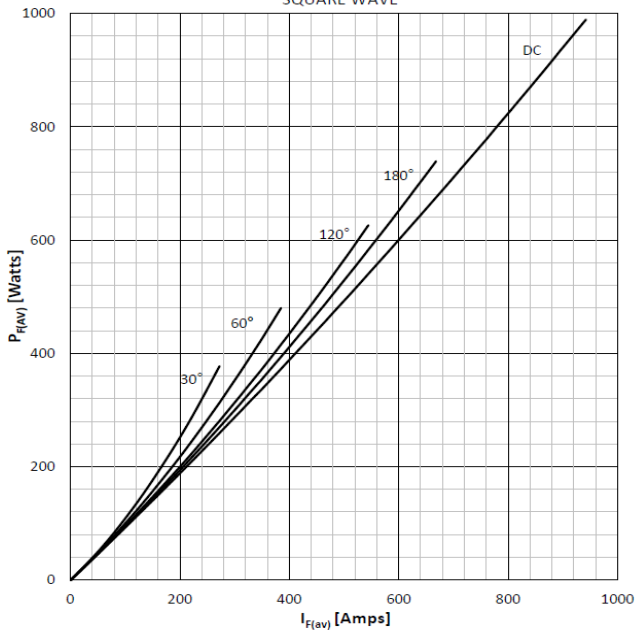
FORWARD CURRENT DERATING CURVE

SINE WAVE



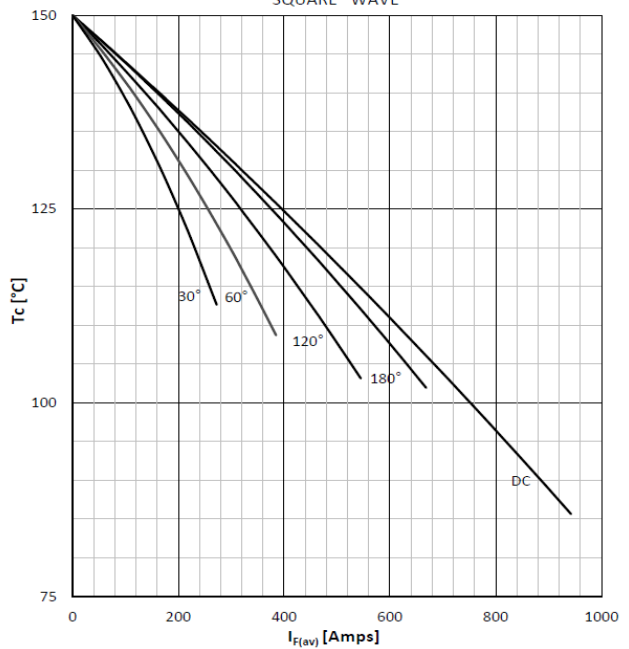
DISSIPATION CHARACTERISTICS

SQUARE WAVE

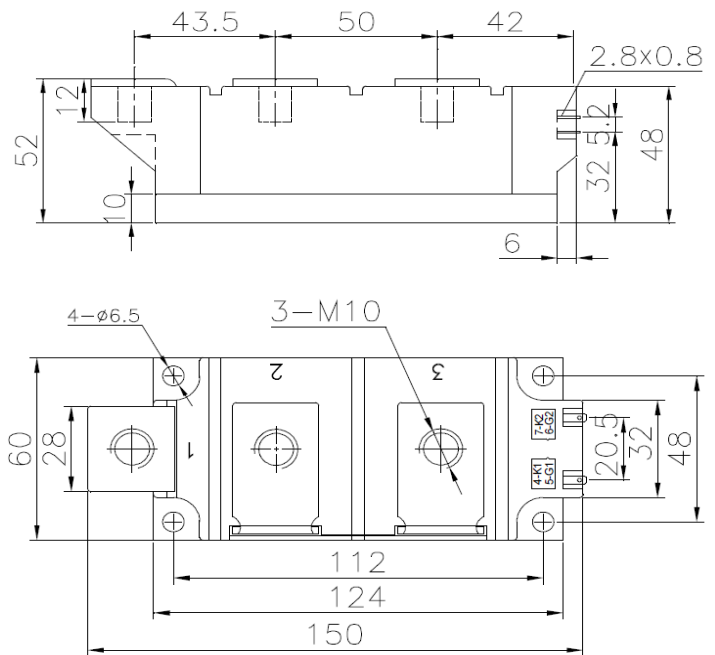
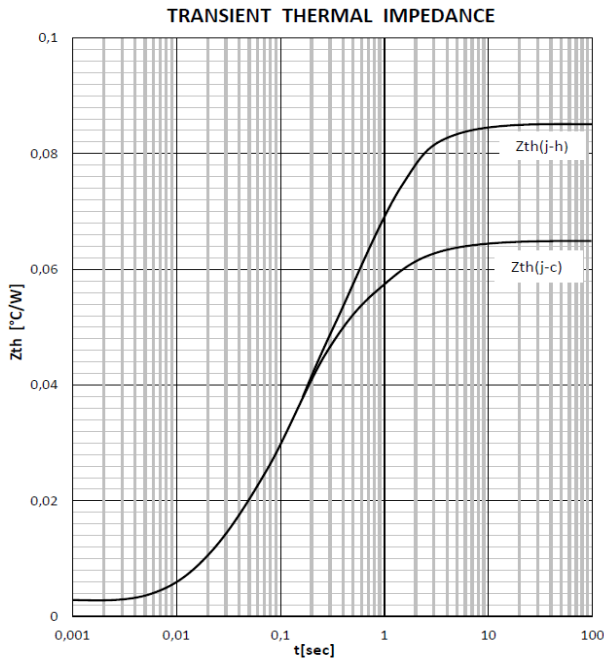
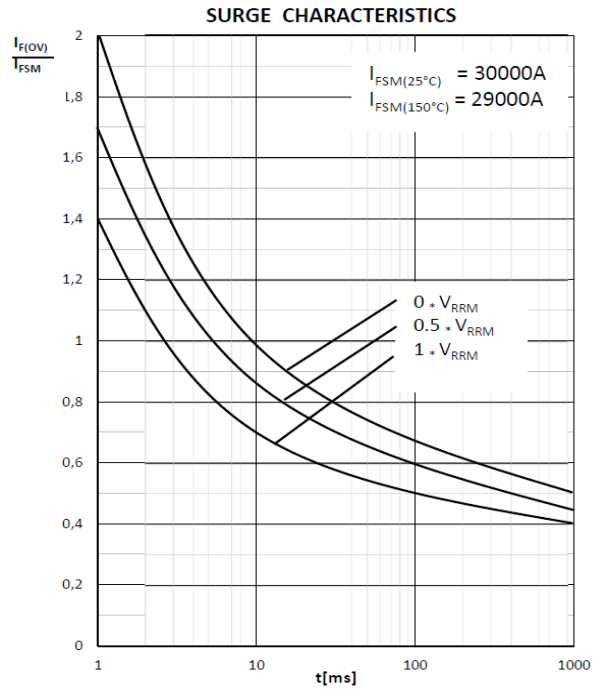
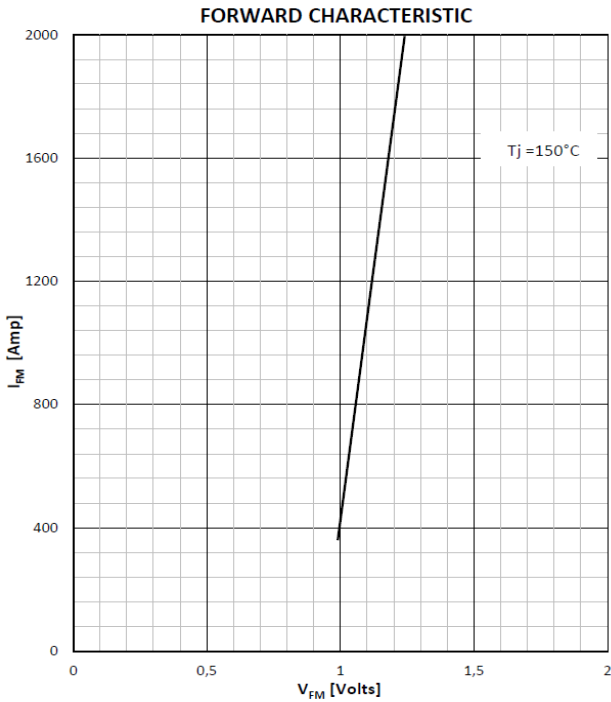


FORWARD CURRENT DERATING CURVE

SQUARE WAVE



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(dimensions in mm)

S.CO.M.E.S. Srl

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