

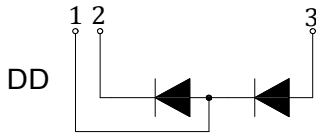
Key Parameters

V_{RRM}	2800-3400	V
$I_{F(AV)}$	320	A
I_{FSM}	10	kA
V_{FO}	0.9	V
r_T	0.65	mΩ

Applications

- Bridge Circuits
- Industry converter
- Battery Supplies

- 3000 V_{RMS} isolating voltage with baseplate
- High power capability
- Industrial standard package


Voltage Ratings

Module Type	$V_{RRM}(V)$	Test Conditions
TMDD 320	2800 3000 3200 3400	$T_{vj} = 25, 150\text{ °C}$ $I_{RRM} = 50\text{ mA}$ $V_R = V_{RRM}$ $t_p = 10\text{ ms}$ $V_{RSM} = V_{RRM} + 100$


Thermal & Mechanical Data

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
R_{thJC}	Thermal Resistance Junction to Case	sine.180°,per diode/per module DC,per diode/per module	-	-	0.11 / 0.055 0.104 / 0.052	°C / W
R_{thCH}	Thermal resistance case to heatsink	Mounting surface smooth flat and greased	-	-	0.02	°C / W
T_{vj}	Maximum junction operating temperature range		-40	-	150	°C
T_{stg}	Storage temperature		-40	-	130	°C
F	Busbar to module M10 Module to heatsink M6	Mounting torque ± 10 %	-	12 6	-	N·m N·m
W	Weight		-	1.5	-	Kg

Current Ratings

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
$I_{F(AV)}$	Mean On-State Current	Half Sine Wave $T_C = 100\text{ °C}$	-	-	317	A
$I_{F(RMS)}$	RMS On-State Current	$T_C = 100\text{ °C}$	-	-	498	A
I_{FSM}	Surge (non-repetitive) On-State Current	10ms, Half Sine Wave, $T_C = 150\text{ °C}$, $V_R = 0$	-	-	10.0	kA
I^2t	Limiting load integral	Sine Wave, 10ms	-	-	50	$10^4\text{ A}^2\text{s}$

Characteristics

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
V_{FM}	Peak on-state voltage	$T_{vj}=25^{\circ}\text{C}$, $I_{FM}=800\text{ A}$	-	-	1.45	V
I_{RRM}	Forward leakage current	$T_{vj}=25^{\circ}\text{C}$, 150°C , $100\%V_{RRM}$	-	-	50	mA
V_{isol}	Isolation voltage	a.c.; 50 Hz; r.m.s. t=1min	-	-	3000	V
		a.c.; 50 Hz; r.m.s. t=1s	-	-	3600	V
V_{FO}	Threshold voltage	$T_{vj}=150^{\circ}\text{C}$	-	-	0.90	V
r_T	Slope resistance	$T_{vj}=150^{\circ}\text{C}$	-	-	0.65	m Ω
a	Vibration resistance	$f=50\text{ HZ}$	-	50	-	m/S ²

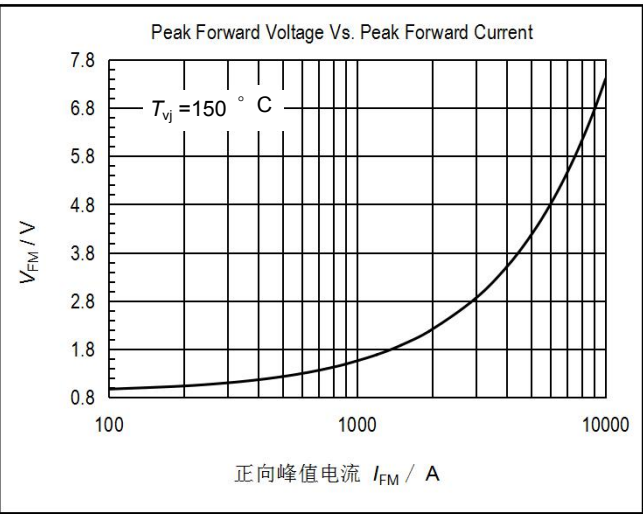


图1. 正向伏安特性曲线

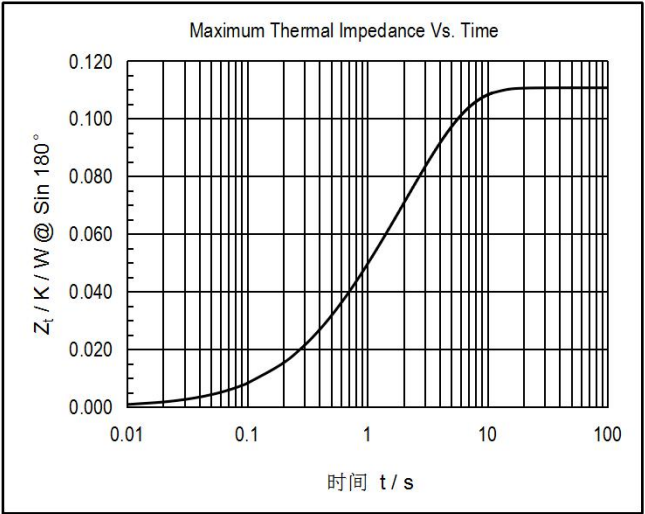


图2. 瞬态热阻抗曲线

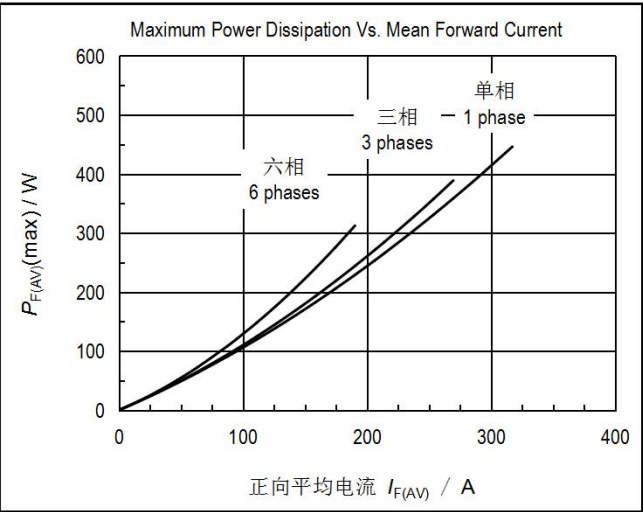


图3. 最大正向功耗与正向平均电流的关系曲线

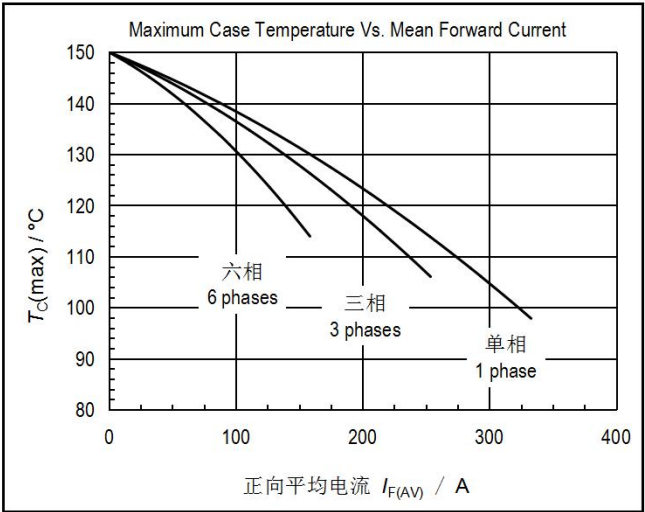


图4. 管壳温度与正向平均电流的关系曲线

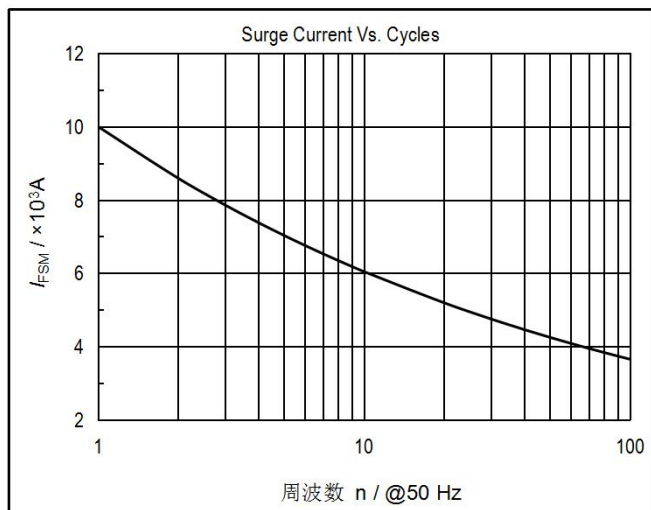


图5. 正向浪涌电流与周波数的关系曲线

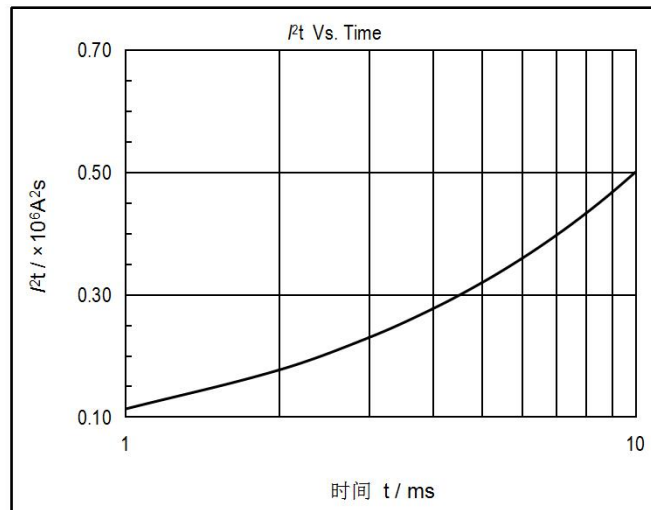


图6. I^2t 特性曲线

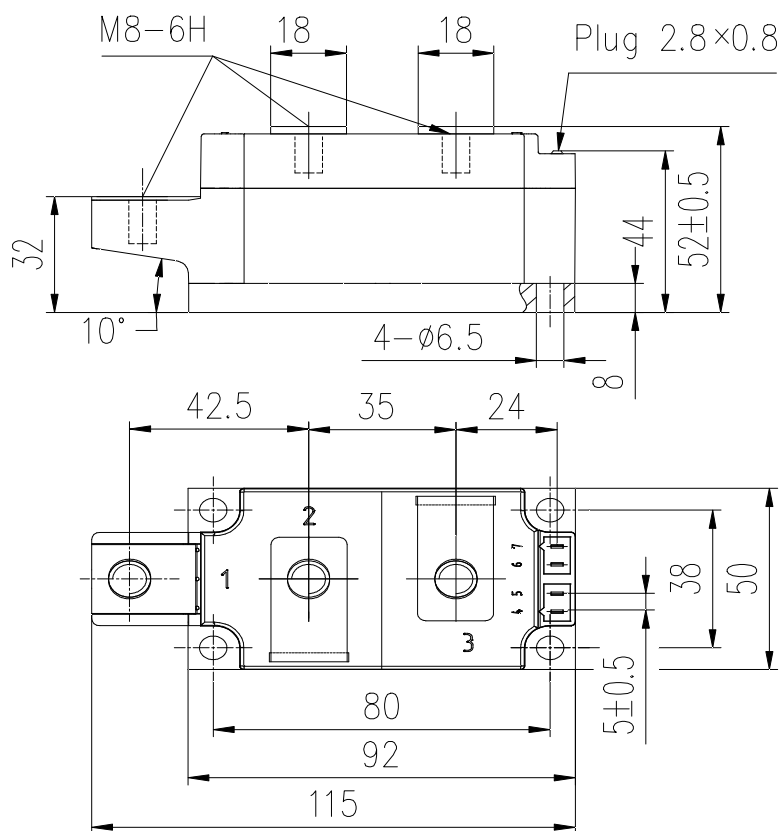


图7. 外形图

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