

Key Parameters

V_{RRM}	2200	V
$I_F (AV)$	200	A
I_{FSM}	5.2	kA
V_{FO}	0.95	V
r_T	0.65	mΩ

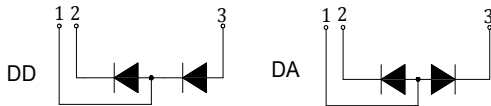
Applications

- 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 200	2200	$T_{vj} = 25, 155\text{ }^{\circ}\text{C}$ $I_{RRM} = 40\text{ mA}$ $V_R = V_{RRM}$ $t_p = 10\text{ ms}$ $V_{RSM} = V_{RRM} + 100\text{ V}$


Thermal & Mechanical Data

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
$R_{th(j-c)}$	Thermal Resistance junction to case	sine.180°, per chip / per module DC , per chip / per module	-	-	0.2 / 0.1 0.19/ 0.095	K / W
$R_{th(C-H)}$	Thermal resistanc case to heatsink	per chip / per module	-	-	0.06 / 0.03	K / W
T_{vj}	Maximum junction operating temperature range		-40	-	155	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-40	-	150	$^{\circ}\text{C}$
F	Busbar to module M6 Module to heatsink M6	Mounting torque $\pm 10\%$	-	6 6	- -	N·m N·m
W	Weight		-	320	-	g

Current Ratings

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
$I_{F(AV)}$	Mean On-State Current	Half Sine Wave $T_C = 100^{\circ}\text{C}$	-	-	201	A
$I_{F(RMS)}$	RMS On-State Current	$T_C = 100^{\circ}\text{C}$	-	-	316	A
I_{FSM}	Surge (non-repetitive) On-State Current	10ms, Half Sine Wave, $T_C = 155^{\circ}\text{C}$, $V_R = 0$	-	-	5.2	kA
I^2t	Limiting load integral	Sine Wave, 10ms	-	-	13.5	$10^4\text{ A}^2\text{s}$

Characteristics

Symb.	Parameter	Test Conditions	Min	Type	Max	Unit
V_{FM}	Peak on-state voltage	$T_{vj}=25\text{ }^{\circ}\text{C}$, $I_{FM}=500\text{ A}$	-	-	1.35	V
I_{RRM}	Forward leakage current	$T_{vj}=25\text{ }^{\circ}\text{C}$, $155\text{ }^{\circ}\text{C}$, $100\%V_{RRM}$	-	-	40	mA
V_{isol}	Isolation voltage	a.c.; 50 Hz; r.m.s. $t=1\text{min}$	-	3000	-	V
V_{FO}	Threshold voltage	$T_{vj}=155\text{ }^{\circ}\text{C}$	-	-	0.95	V
r_T	Slope resistance	$T_{vj}=155\text{ }^{\circ}\text{C}$	-	-	0.65	m Ω

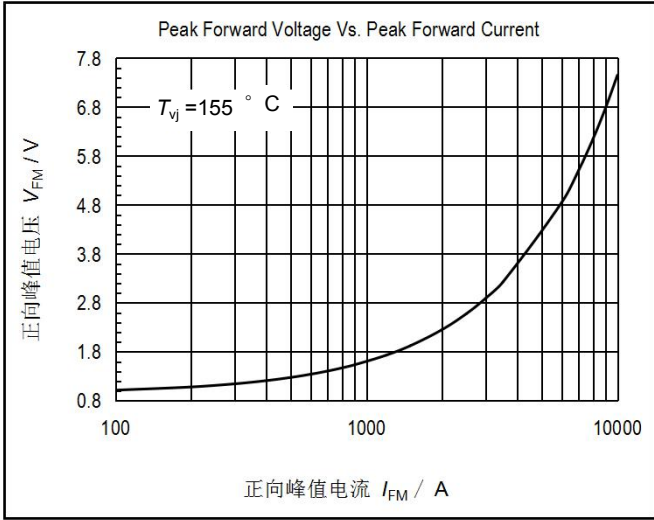


图1. 正向伏安特性曲线

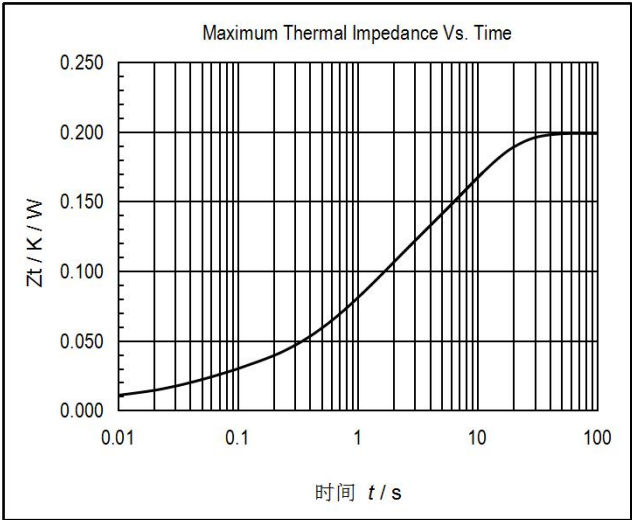


图2. 瞬态热阻抗曲线

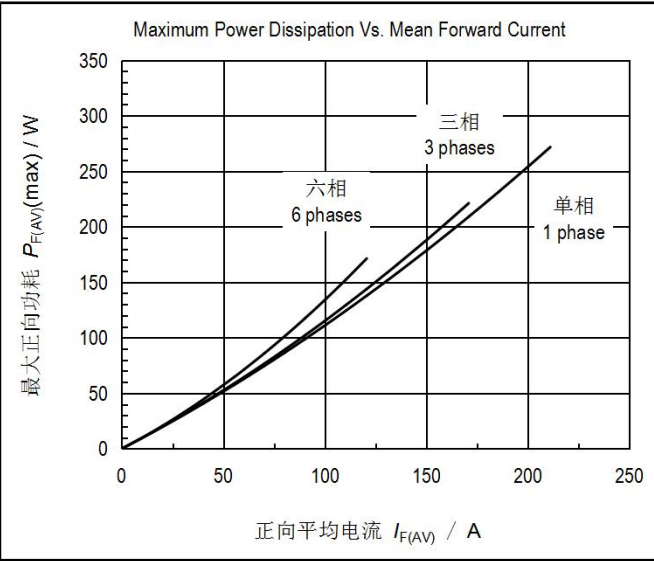


图3. 最大正向功耗与正向平均电流的关系曲线

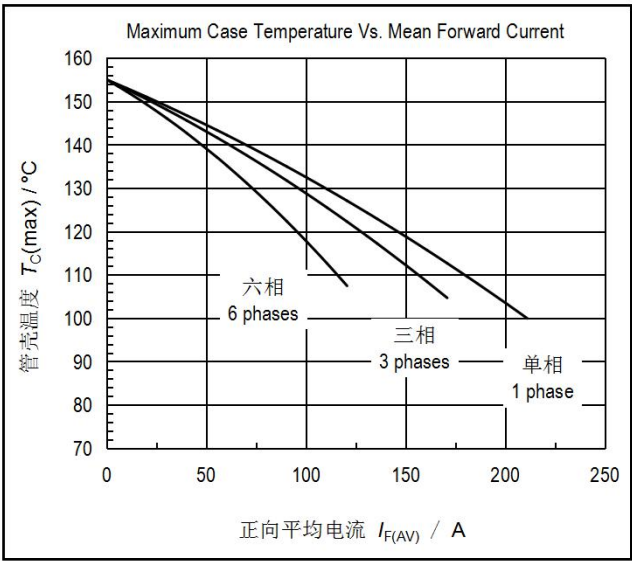


图4. 管壳温度与正向平均电流的关系曲线

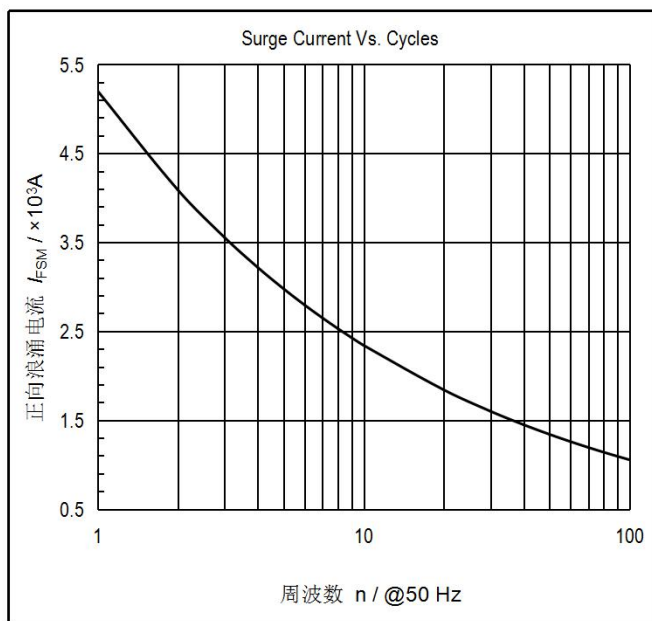


图5. 正向浪涌电流与周波数的关系曲线

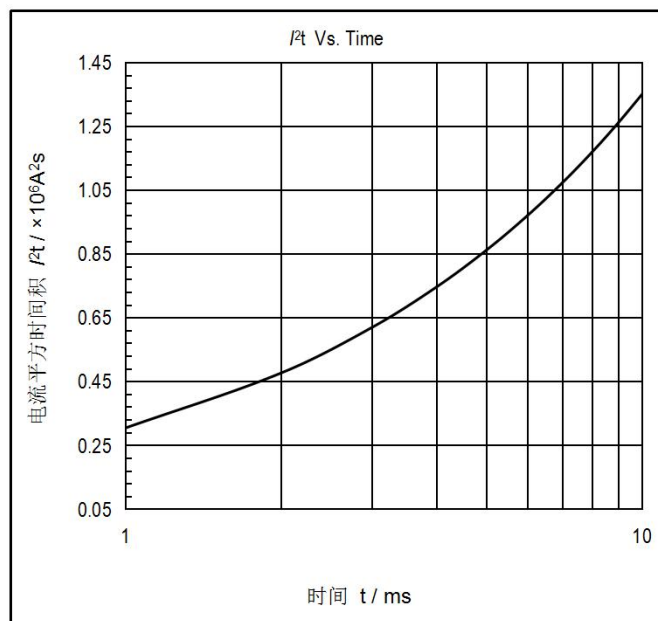


图6. I^2t 特性曲线

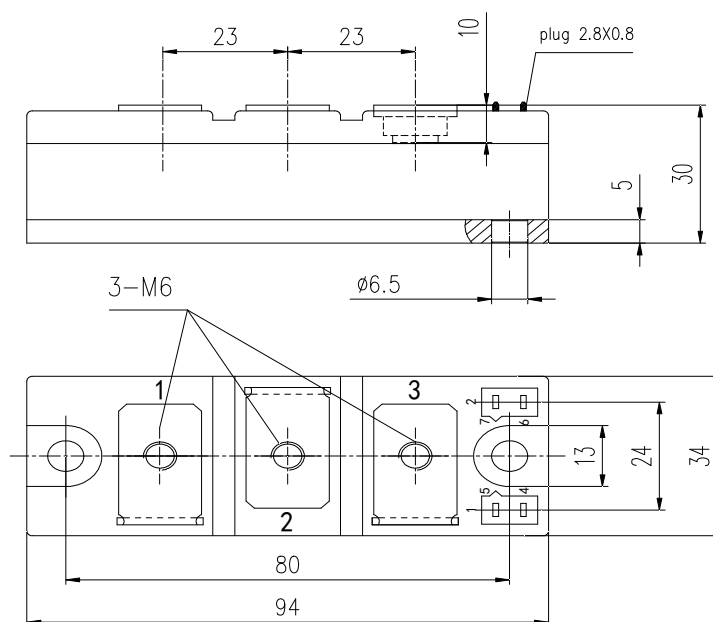


图7. 外形图

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