

关键参数

Key Parameters

V_{RRM}		1200	V
V_F	Typ.	1.60	V
I_F	Max.	100	A
I_{FRM}	Max.	200	A

典型应用

Typical Applications

●工业整流	Industrial Rectification
●吸收电路	Snubber Circuit

特点

Features

●高浪涌能力	High Surge Capability
●绝缘基板	Isolated Baseplate
●双二极管电路	Dual Diode Double Circuit

电路结构

Circuit Configuration

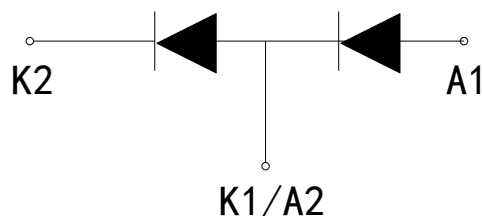


图 1.电路结构

Fig. 1 Circuit configuration

模块外形

Module Appearance



图 2. 模块外形

Fig. 2 Module appearance

模块标签说明

Module Label Code Instruction

	数据位置 Data position	数据内容 Content of data
	1--8	模块批次号 Module batch number
	9--12	模块序列号 Module serial number

最大额定值
Absolute Maximum Ratings

符号 Symbol	参数名称 Parameter	测试条件 Test Conditions	数值 Value	单位 Unit
V_{RRM}	重复峰值电压 Repetitive voltage	$T_C = 25\text{ }^{\circ}\text{C}$	1200	V
I_F	正向直流电流 Forward current	DC	100	A
I_{FRM}	正向重复峰值电流 Peak forward current	$t_P = 1\text{ ms}$	200	A
I_{FSM}	浪涌电流 Surge current	$V_R = 0\text{ V}$, $t_P = 10\text{ ms}$, $T_{vj} = 150\text{ }^{\circ}\text{C}$	800	A
ρ_t	ρ_t 值 ρ_t	$V_R = 0\text{ V}$, $t_P = 10\text{ ms}$, $T_{vj} = 150\text{ }^{\circ}\text{C}$	3.2	kA^2s
V_{isol}	绝缘电压(模块) Isolation voltage – per module	短接所有端子, 端子与基板间施加电压 (Connected terminals to base plate), AC RMS, 1 min, 50Hz, $T_C = 25\text{ }^{\circ}\text{C}$	2500	V

热和机械数据
Thermal & Mechanical Data

参数 Symbol	说明 Explanation	值 Value	单位 Unit
爬电距离 Creepage distance	端子-散热器 Terminal to heatsink	30	mm
	端子-端子 Terminal to terminal	25	mm
绝缘间隙 Clearance	端子-散热器 Terminal to heatsink	24	mm
	端子-端子 Terminal to terminal	13	mm
相对漏电起痕指数 CTI (Comparative Tracking Index)		>600	

热和机械数据

Thermal & Mechanical Data

符号 Symbol	参数名称 Parameter	测试条件 Test Conditions	最小值 Min.	典型值 Typ.	最大值 Max.	单位 Unit
$R_{th(J-C)}$	结壳热阻 Thermal resistance – Diode				280	K / kW
$R_{th(C-H)}$	接触热阻 Thermal resistance – case to heatsink	安装力矩 5Nm, 导热脂 1W/m·K Mounting torque 5Nm, with mounting grease 1W/m·K		100		K / kW
$T_{vj\ op}$	工作结温 Operating junction temperature		-40		150	°C
T_{stg}	存储温度 Storage temperature range		-40		125	°C
M	安装力矩 Screw torque	安装紧固用 - M5 Mounting - M5	2.4		2.8	Nm
		电路互连用 - M5 Electrical connections - M5	2.4		2.8	Nm
L_M	模块电感 Module inductance			30		nH
R_{INT}	模块端子-芯片电阻 Internal transistor resistance, terminals - chip	$T_C = 25\ ^\circ\text{C}$		0.5		mΩ

电特性值

Electrical Characteristics

除非特别声明, 否则 $T_C = 25\ ^\circ\text{C}$ $T_C = 25\ ^\circ\text{C}$ unless otherwise stated

符号 Symbol	参数名称 Parameter	条件 Test Conditions	最小值 Min.	典型值 Typ.	最大值 Max.	单位 Unit
I_{RRM}	重复反向电流 Repetitive reverse current	$V_{RM} = V_{RRM}$			1	mA
		$V_{RM} = V_{RRM}, T_C = 125\ ^\circ\text{C}$			3	mA
		$V_{RM} = V_{RRM}, T_C = 150\ ^\circ\text{C}$			5	mA
V_F	正向电压 Forward voltage	$I_F = 100\text{A}$		1.60	2.00	V
		$I_F = 100\text{A}, T_{vj} = 125\ ^\circ\text{C}$		1.65		V
		$I_F = 100\text{A}, T_{vj} = 150\ ^\circ\text{C}$		1.65		V

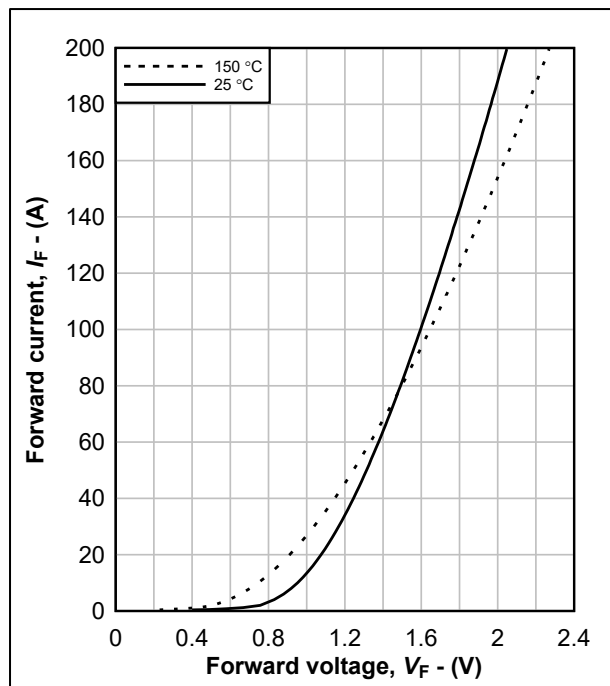


图 3.输出特性典型曲线, $I_F = f(V_F)$

Fig.3 Typical output characteristics, $I_F = f(V_F)$

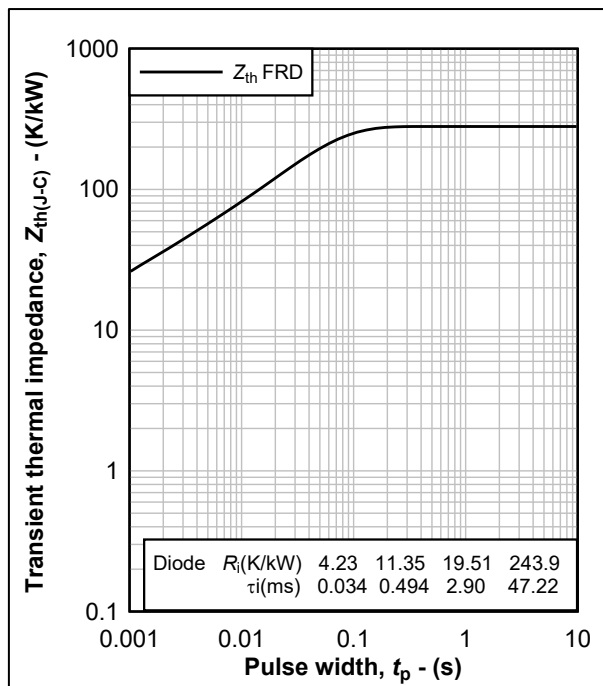
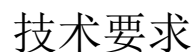


图 4. 瞬态热阻抗曲线, $Z_{th(J-C)} = f(t_p)$

Fig.4 Transient thermal impedance, $Z_{th(J-C)} = f(t_p)$



1、未注尺寸公差 ± 0.2 。

重量 Weight: 145g 模块外观类型 Module outline code: T1

图 5. 模块外观尺寸

Fig. 5 Module outlines

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