



SC06H060

主要参数 MAIN CHARACTERISTICS

V_{RRM}	650V
I_F ($T_C=152^{\circ}C$)	6A
Q_C	13nC

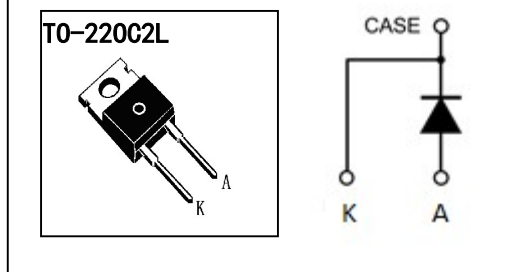
用途 APPLICATIONS

- SMPS
- PFC
- Solar/Wind Renewable Energy
- Power Inverters
- Motor Drives
- UPS

产品特性 FEATURES

- Low Conduction and Switching Loss
- Positive Temperature Coefficient on V_F
- Temperature Independent Switching Behavior
- Fast Reverse Recovery
- High Surge Current Capability

封装 Package



订货信息 ORDER MESSAGE

订 货 型 号 Order codes				印 记 Marking	封 装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube	有卤-编带 Halogen-Reel	无卤-编带 Halogen Free-Reel		
SC06H060-CL-B	SC06H060-CL-BR	N/A	N/A	SC06H060	TO-220C2L



绝对最大额定值 ABSOLUTE RATINGS ($T_c=25^{\circ}\text{C}$)

项 目 Parameter	符 号 Symbol	测试条件 Test Conditions	数 值 Value	单 位 Unit
最大反向重复峰值电压 Repetitive peak reverse voltage	V_{RRM}	$T_J = 25^{\circ}\text{C}$	650	V
反向浪涌峰值电压 Peak Reverse Surge Voltage	V_{RSM}	$T_J = 25^{\circ}\text{C}$	650	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	$T_J = 25^{\circ}\text{C}$	650	V
正向平均电流 Average forward current	I_F	$T_J = 25^{\circ}\text{C}$	18	A
		$T_J = 135^{\circ}\text{C}$	8.5	A
		$T_J = 152^{\circ}\text{C}$	6	A
正向峰值浪涌电流 Surge non repetitive forward current	I_{FSM}	$T_C = 25^{\circ}\text{C}$, $T_P = 10\text{ ms}$ Half Sine Wave	49	A
		$T_C = 125^{\circ}\text{C}$, $T_P = 10\text{ ms}$ Half Sine Wave	44	A
		$T_C = 25^{\circ}\text{C}$, $T_P = 10\text{ }\mu\text{s}$ Pulse	209	A
正向重复峰值浪涌电流 Repetitive Peak Forward Surge Current	I_{FRM}	$T_C = 25^{\circ}\text{C}$, $T_P = 10\text{ ms}$ Half Sine Wave, $D = 0.1$	38	A
		$T_C = 125^{\circ}\text{C}$, $T_P = 10\text{ ms}$ Half Sine Wave, $D = 0.1$	34	A
Power Dissipation	P_D	$T_C = 25^{\circ}\text{C}$	71	W
		$T_C = 125^{\circ}\text{C}$	23	W
最高结温 Maximum junction temperature	T_J		175	$^{\circ}\text{C}$
储存温度 Storage temperature range	T_{STG}		-55~+175	$^{\circ}\text{C}$





电特性 ELECTRICAL CHARACTERISTICS

参数	项 目 Parameter	测试条件 Tests conditions	典型值 Value(typ)	最大值 Value(max)	单位 Unit
DC Blocking Voltage	V_{DC}	$I_R = 100 \mu A, T_J = 25^\circ C$	> 650		V
Forward Voltage	V_F	$I_F = 6 A, T_J = 25^\circ C$	1.5	1.8	V
		$I_F = 6 A, T_J = 175^\circ C$	1.9	2.2	V
Reverse Current	I_R	$V_R = 600 V, T_J = 25^\circ C$	< 1	30	μA
		$V_R = 600 V, T_J = 175^\circ C$	10	160	μA
Total Capacitive Charge	Q_C	$I_F = 6 A, dI/dt = 300 A/\mu s, V_R = 400 V, T_J = 25^\circ C$	13		nC
Total Capacitance	C	$V_R = 1 V, T_J = 25^\circ C, f = 1 MHz$	244		pF
		$V_R = 200 V, T_J = 25^\circ C, f = 1 MHz$	37		pF
		$V_R = 400 V, T_J = 25^\circ C, f = 1 MHz$	36		pF

热特性 THERMAL CHARACTERISTICS

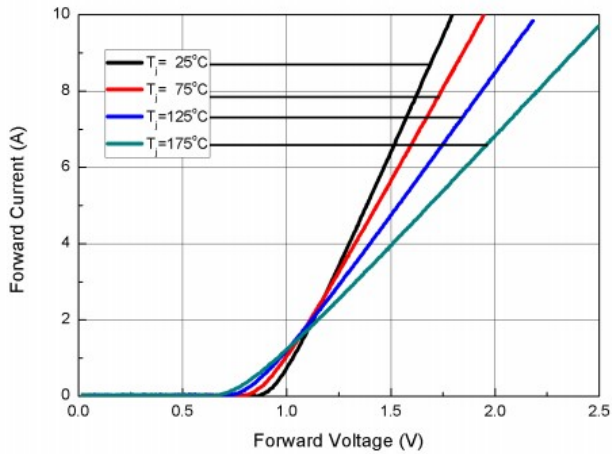
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	TO-220C2L $R_{th(j-c)}$		2.1	$^\circ C/W$



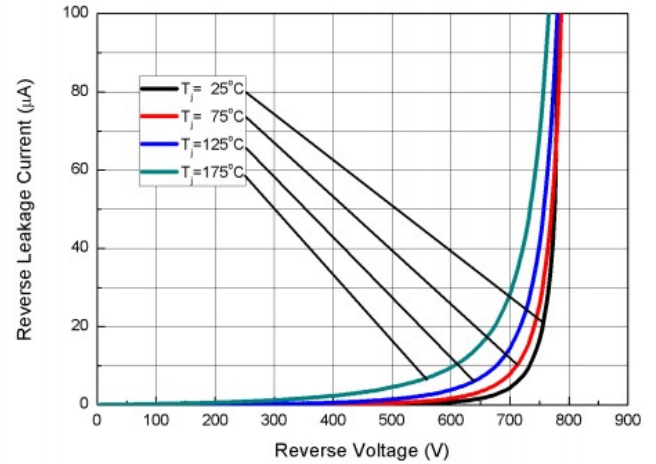


特征曲线 ELECTRICAL CHARACTERISTICS (curves)

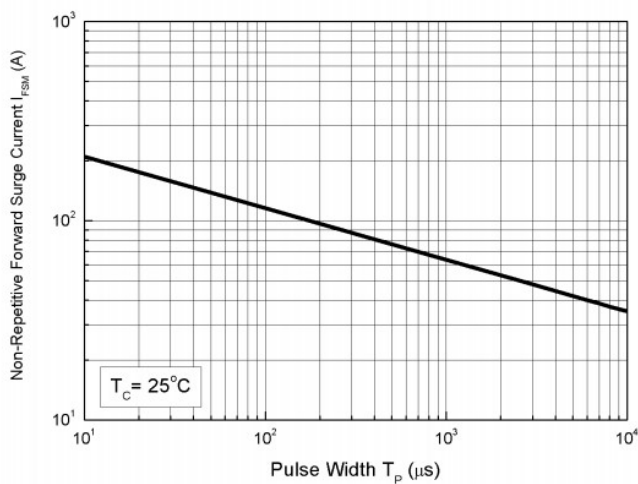
IF vs VF



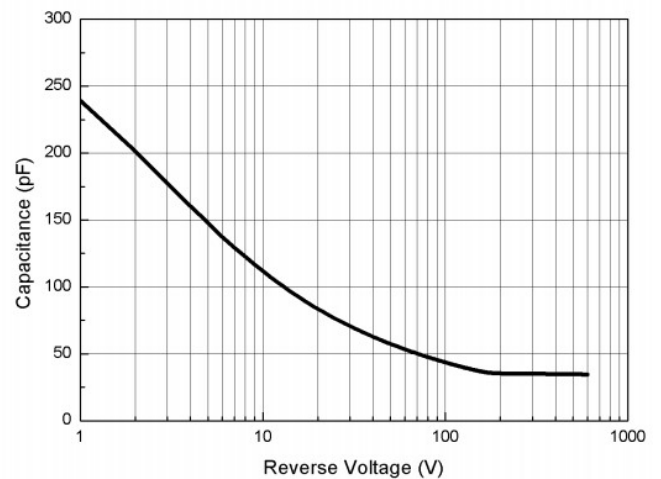
IR vs VR



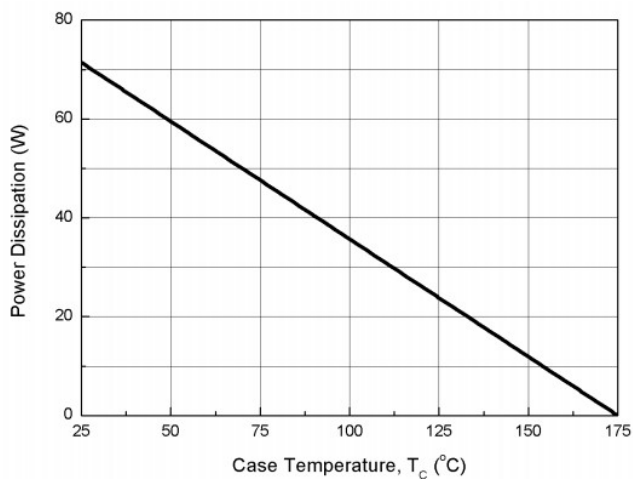
IFSM vs TP



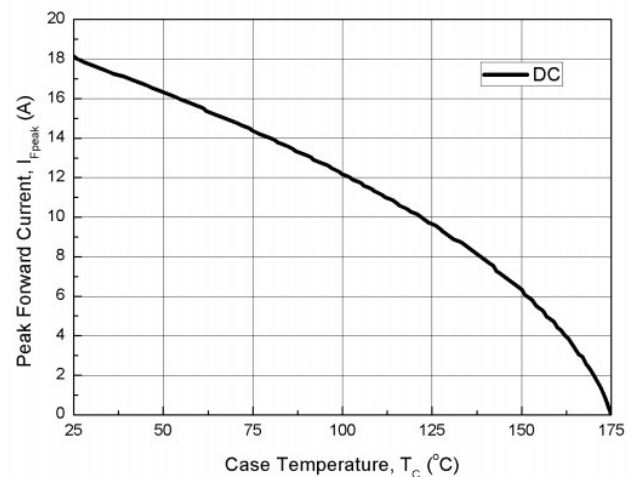
CT vs VR



PD vs TC



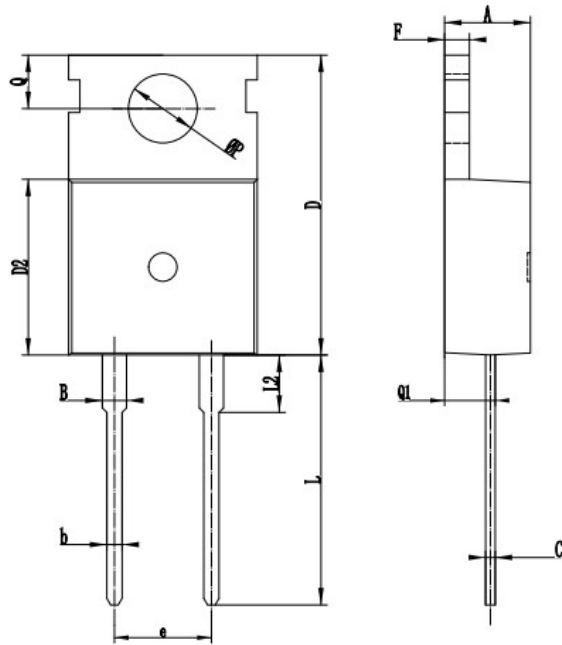
IFpeak vs TC





外形尺寸 PACKAGE MECHANICAL DATA
TO-220C2L

单位 Unit : mm



符号 symbol	单位: mm	
	MIN	MAX
A	4.30	4.70
B	1.22	1.40
b	0.70	0.95
c	0.40	0.65
D	15.20	16.20
D2	9.00	9.40
E	9.70	10.10
e	4.78	5.38
F	1.25	1.40
L	12.60	13.60
L2	2.80	3.20
Q	2.60	3.00
Q1	2.20	2.60
P	3.50	3.80



**注意事项**

1. 吉林华微电子股份有限公司的产品销售分为直销和销售代理，无论哪种方式，订货时请与公司核实。
2. 购买时请认清公司商标，如有疑问请与公司本部联系。
3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知

NOTE

1. Jilin Sino-microelectronics co., Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

联系方式**吉林华微电子股份有限公司**

公司地址：吉林省吉林市深圳街 99 号

邮编：132013

总机：86-432-64678411

传真：86-432-64665812

网址：www.hwdz.com.cn

市场营销部

地址：吉林省吉林市深圳街 99 号

邮编：132013

电话：86-432-64675588

64675688

64678411-3098/3099

传真：86-432-64671533

CONTACT**JILIN SINO-MICROELECTRONICS CO., LTD.**

ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China.

Post Code: 132013

Tel: 86-432-64678411

Fax: 86-432-64665812

Web Site: www.hwdz.com.cn

MARKET DEPARTMENT

ADD: No.99 Shenzhen Street, Jilin City, Jilin Province, China.

Post Code: 132013

Tel: 86-432-64675588

64675688

64678411-3098/3099

Fax: 86-432-64671533

