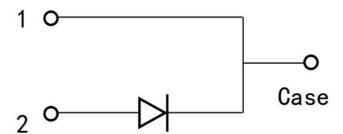


## 650V 6A SiC SBD 二极管

### 特点:

- ✓ 无反向恢复时间
- ✓ 正温度系数
- ✓ 高工作结温
- ✓ 响应速度快
- ✓ 无铅/符合 RoHS 标准

### 封装:



### 应用:

- ✓ 光伏逆变器、储能变流器
- ✓ 充电桩模块
- ✓ 电机驱动、车载 OBC
- ✓ 高压 DC/DC 变换器
- ✓ 开关电源

产品代码	封装形式
PXSD06065T1	TO220-2

### Maximum Ratings (Tc=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{RRM}$	Repetitive peak reverse voltage	650	V
$I_F$	Continuous forward current	$T_c < 152^\circ\text{C}$ 6	A
$I_{FSM}$	Non-repetitive forward surge current	$T_c=25^\circ\text{C}$ , $t_p=10\text{ms}$ , Half sine pulse 58	A
$\int i^2 dt$	$i^2t$ value	$T_c=25^\circ\text{C}$ , $t_p=10\text{ms}$ 16	A <sup>2</sup> S
$P_{tot}$	Power Dissipation	$T_c=25^\circ\text{C}$ 107	W
		$T_c=110^\circ\text{C}$ 46	W
		$T_c=150^\circ\text{C}$ 17	W
$T_j, T_{stg}$	Operating and Storage Temperature	-55 to +175	°C

## Electrical Characteristics (Tc=25°C unless otherwise noted)

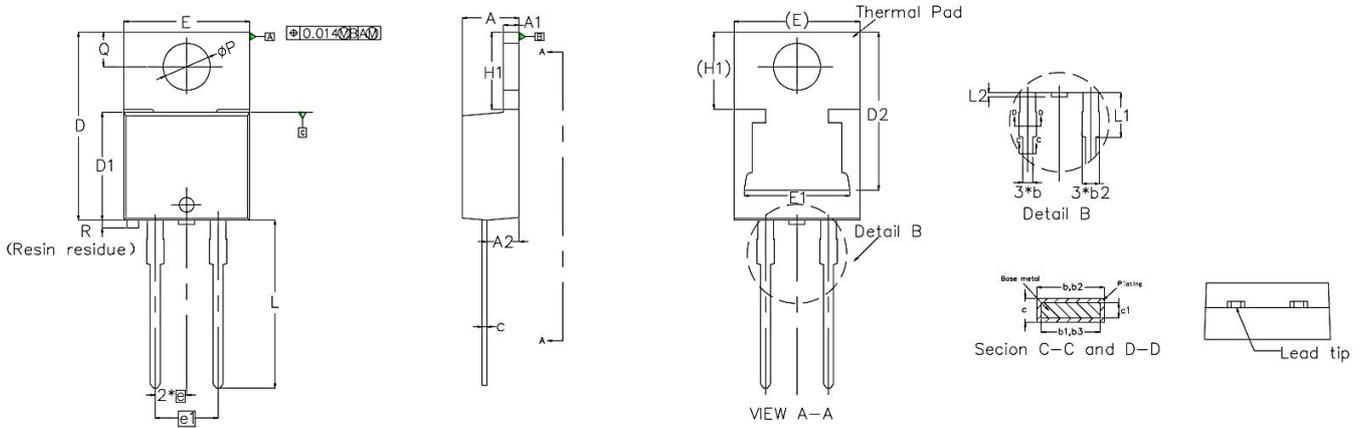
Symbol	Parameter	Test Conditions	Value			Unit
			Min.	Typ.	Max.	
$V_{DC}$	DC blocking voltage		650	-	-	V
$V_F$	Forward voltage	$I_F=6A, T_c=25^\circ C$	-	1.36	1.5	V
$I_R$	Reverse current	$V_R=650V, T_c=25^\circ C$	-	0.8	40	$\mu A$
$Q_C$	Total capacitive charge	$V_R=400V$	-	20	-	nC
C	Total capacitance	$V_R=1V, f=1MHz$	-	350	-	pF
		$V_R=200V, f=1MHz$	-	45	-	pF
		$V_R=400V, f=1MHz$	-	35	-	pF
$E_C$	Capacitance Stored Energy	$V_R=400V$	-	3.2	-	$\mu J$

## Thermal Characteristics

Symbol	Parameter	Value		Unit	Note
		Typ.	Max.		
$R_{th(j-c)}$	Thermal resistance (Junction to case)	14	-	$^\circ C/W$	Figure 8

# Package Dimensions

## To -220 -2



SYMBOL	MILLIMETERS			NOTES	SYMBOL	MILLIMETERS			NOTES
	Normal	MIN.	MAX.			Normal	MIN.	MAX.	
A	4.55	4.44	4.65		E1	8.57	8.25	8.89	
A1	1.27	1.14	1.39		e	2.54	2.41	2.67	
A2	2.60	2.54	2.79		e1	5.08	4.95	5.20	
b	0.85	0.69	0.94		H1	6.20	6.09	6.40	
b1	0.83	0.38	0.97		L	13.60	13.52	14.00	
b2	1.33	1.20	1.45		L1	3.60	3.56	3.80	
b3	1.33	1.20	1.45		L2	—	0	0.35	
c	0.50	0.36	0.56		∅P	3.80	3.70	3.91	
c1	0.48	0.36	0.56		Q	2.80	2.62	2.87	
D	15.25	14.95	15.32		R			0.2	
D1	8.75	8.50	8.89						
D2	12.85	12.20	13.30						
E	10.18	10.11	10.40						

## **Important Statement**

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