

/ Descriptions

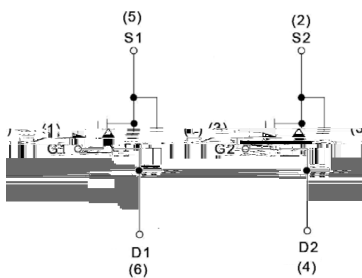
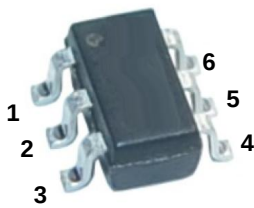
SOT23-6 P MOS
 Dual P-Channel MOSFET in a SOT23-6 Plastic Package.

/ Features

Super high dense cell design for low $R_{DS(ON)}$, Rugged and reliable. HF product.

/ Applications

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

/ Equivalent Circuit**/ Pinning**

PIN1 G1 PIN 2 S2 PIN 3 G2

PIN 4 D2 PIN 5 S1 PIN 6 D1

/ Marking

See Marking Instructions

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-20	V
Gate-Source Voltage	V_{GSS}	± 12	V
Continuous Drain Current	I_D^*	-3.0	A
Pulsed Drain Current	I_{DM}^*	-12	A
Diode Continuous Forward Current	I_S^*	-2.0	A
Power Dissipation for Single Operation	$P_D^* (Ta=25^\circ C)$	1.25	W
Power Dissipation for Single Operation	$P_D^* (Ta=100^\circ C)$	0.5	W
Maximum Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 150	$^\circ C$
Thermal Resistance-Junction to Ambient	R_{JA}^*	70	$^\circ C/W$

Note:

* Surface Mounted on 1in2 pad area, $t = 10\text{sec}$.

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V \quad I_{DS}=-250 \text{ A}$	-20			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-16V \quad V_{GS}=0V$			-1	A
		$V_{DS}=-16V \quad V_{GS}=0V$ $T_j=85^\circ C$			-10	
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS} \quad I_{DS}=-250 \text{ A}$	-0.50	-0.8	-1.0	V
Gate Leakage Current	I_{GSS}	$V_{GS}=\pm 12V \quad V_{DS}=0V$			± 100	nA
Drain-Source On-state Resistance	$R_{DS(on)a}$	$V_{GS}=-10V \quad I_{DS}=-2.7A$		75	97	m Ω
		$V_{GS}=-4.5V \quad I_{DS}=-2.7A$		88	110	
		$V_{GS}=-2.5V \quad I_{DS}=-2.2A$		120	150	

/ Electrical Characteristics(Ta=25)

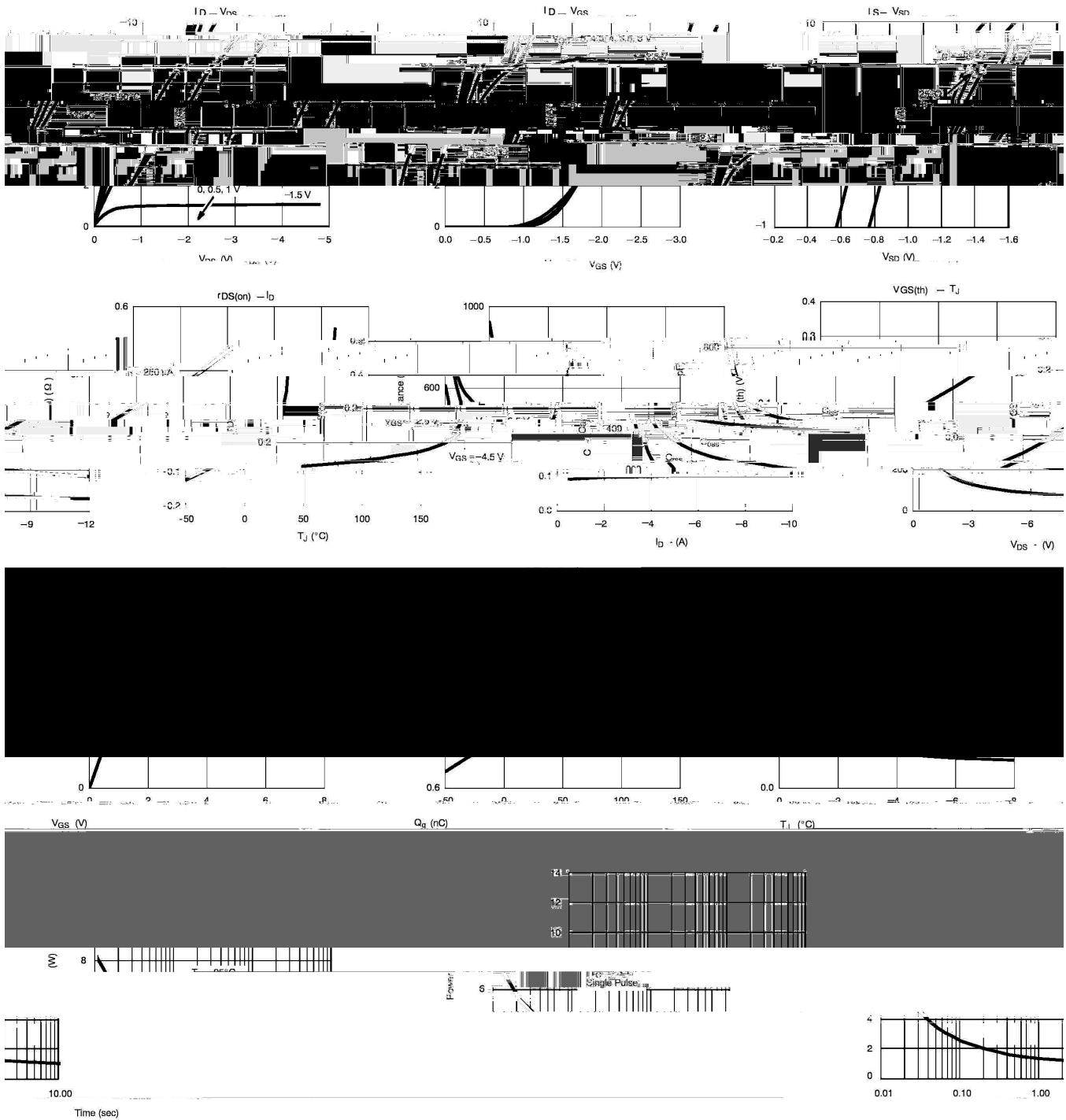
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate Resistance	R_G^b	$V_{GS}=0V$ $V_{DS}=0V$ $F=1MHz$		6		Ω
Input Capacitance	C_{iss}^b	$V_{GS}=0V$ $V_{DS}=-6V$ Frequency=1.0MHz		415		pF
Output Capacitance	C_{oss}^b			223		
Reverse Transfer Capacitance	C_{rss}^b			84		
Turn-on Delay Time	$t_{d(ON)}^b$	$V_{DD}=-6V$ $R_L=6$ $I_{DS}=-1A$ $V_{GEN}=-10V$ $R_G=6$		13	25	ns
Turn-on Rise Time	T_r^b			36	60	
Turn-off Delay Time	$T_{d(OFF)}^b$			42	70	
Turn-off Fall Time	T_f^b			34	60	

Notes:

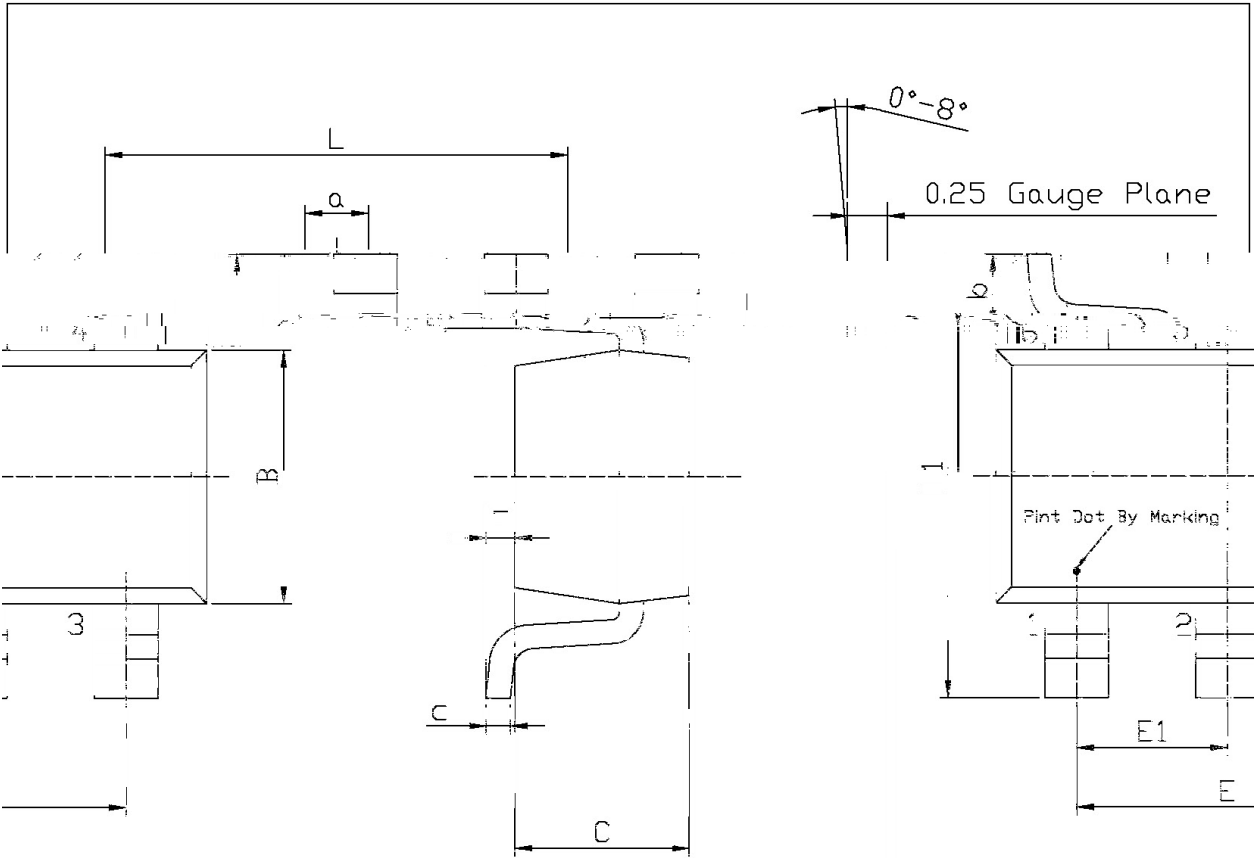
a : Pulse test ; pulse width 300 s, duty cycle 2%.

b : Guaranteed by design, not subject to production testing.

/ Electrical Characteristic Curve



/ Package Dimensions



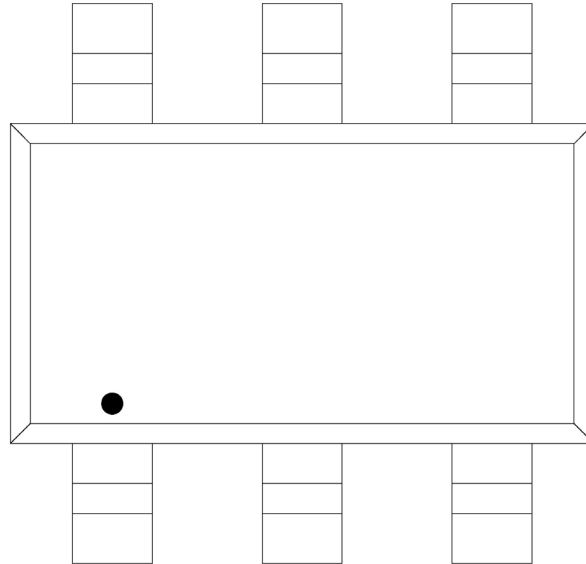
Unit: mm

Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
Min	Max		Min	Max
2.82	3.32	E1	0.85	1.05
1.50	1.70	a	0.35	0.50
0.90	1.30	c	0.10	0.20
2.60	3.00	b	0.35	0.55
1.80	2.00	F	0	0.15

Symbol	Dimension
L	
B	
C	
L1	
E	

SOT23-6

/ Marking Instructions

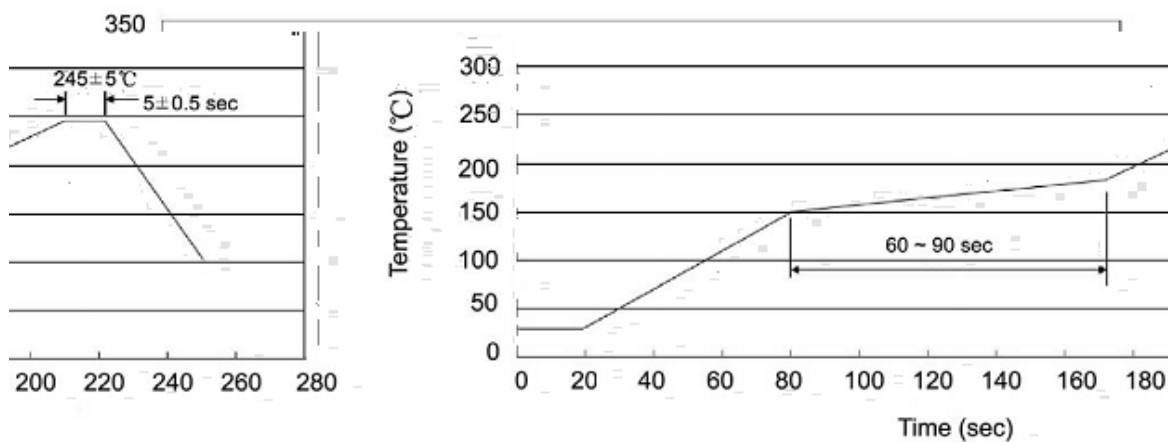


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Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5℃ Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱