/ Descriptions

SOT23-6 P MOS

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

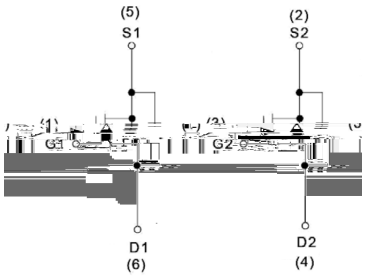
/ Features

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

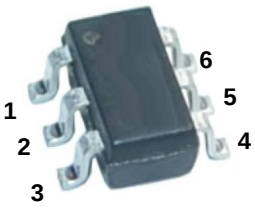
/ Applications

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℃)	1.25	W
Power Dissipation for Single Operation	P_D* (Ta=100℃)	0.5	W
Maximum Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃
Thermal Resistance-Junction to Ambient	R $_{JA}$*	70	℃/W

Note:

* Surface Mounted on 1in2 pad area, t 10sec.

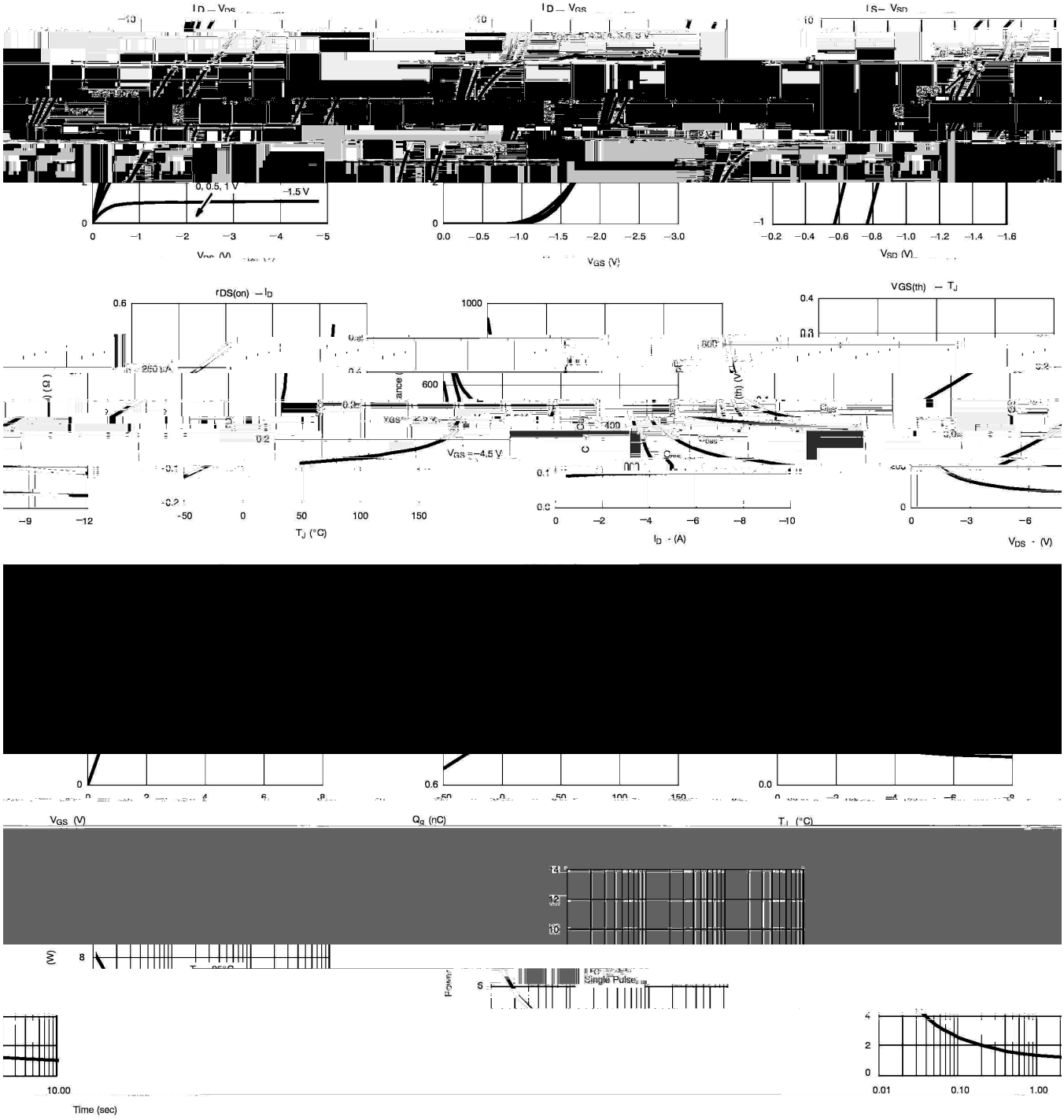
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_{DS}=-250 A	-20			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-16V V_{GS}=0V			-1	A
		V_{DS}=-16V V_{GS}=0V T_J=85°C			-10	
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_{DS}=-250 A	-0.50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

/ Electrical Characteristics(Ta=25)

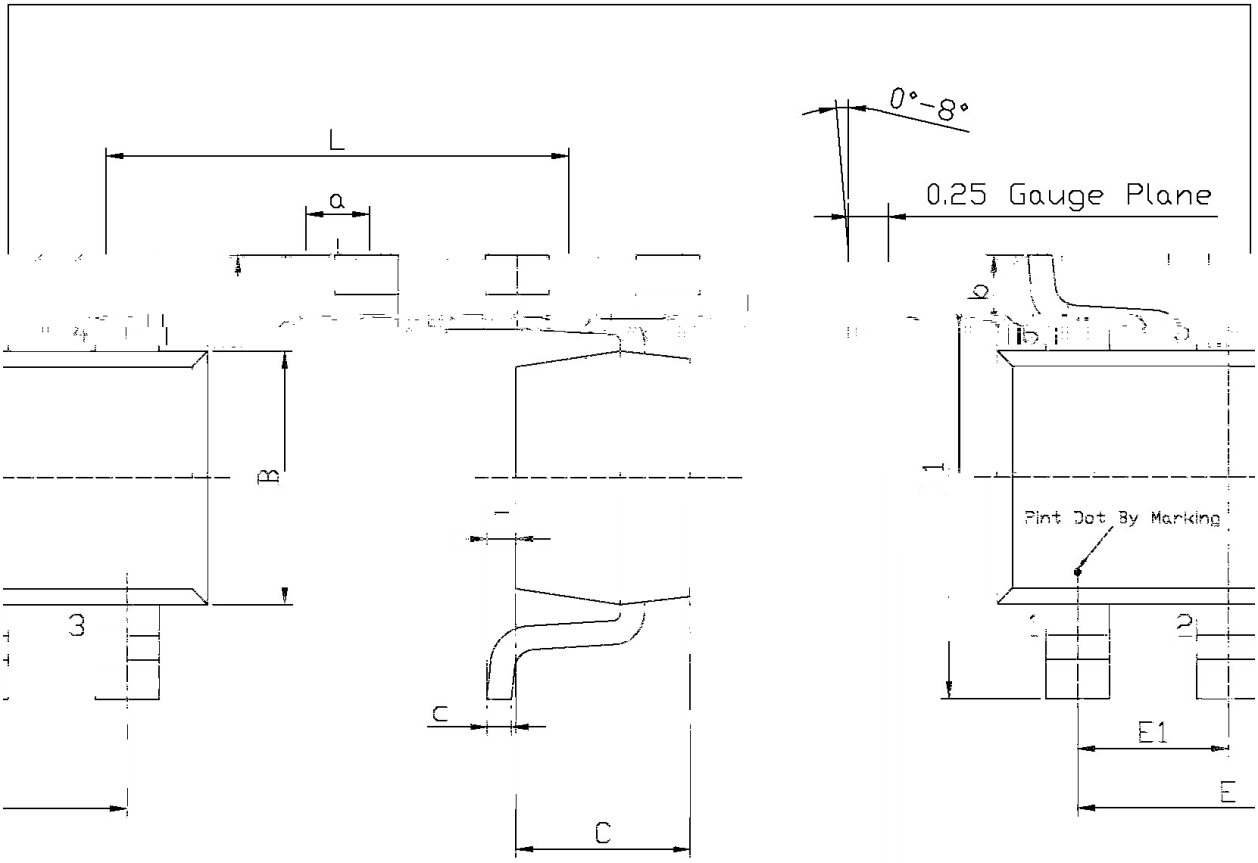
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate Resistance	R_G [b]	V_{GS}=0V V_{DS}=0V F=1MHz		6		Ω
Input Capacitance	C_{iss} [b]	V_{GS}=0V V_{DS}=-6V Frequency=1.0MHz		415		pF
Output Capacitance	C_{oss} [b]			223		
Reverse Transfer Capacitance	C_{rss} [b]			84		
Turn-on Delay Time	$t_{d(ON)}$ [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



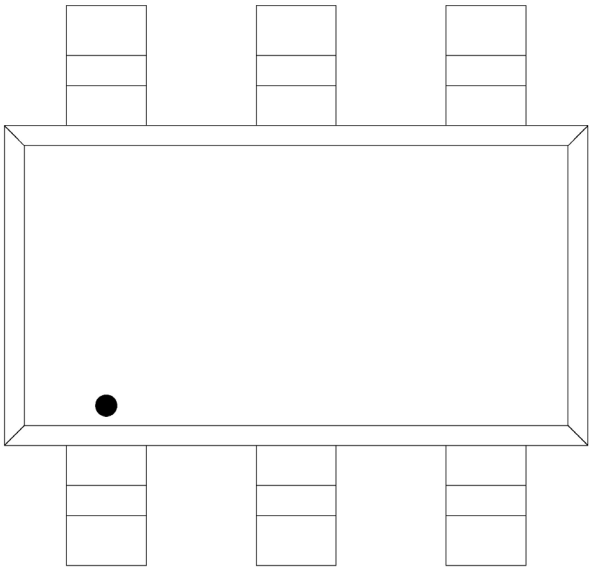
Unit: mm

Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
Min	Max		Min	Max
2.82	3.02	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

Dime	
Symbol	
L	
B	
C	
L1	
E	

SOT23-6

/ Marking Instructions

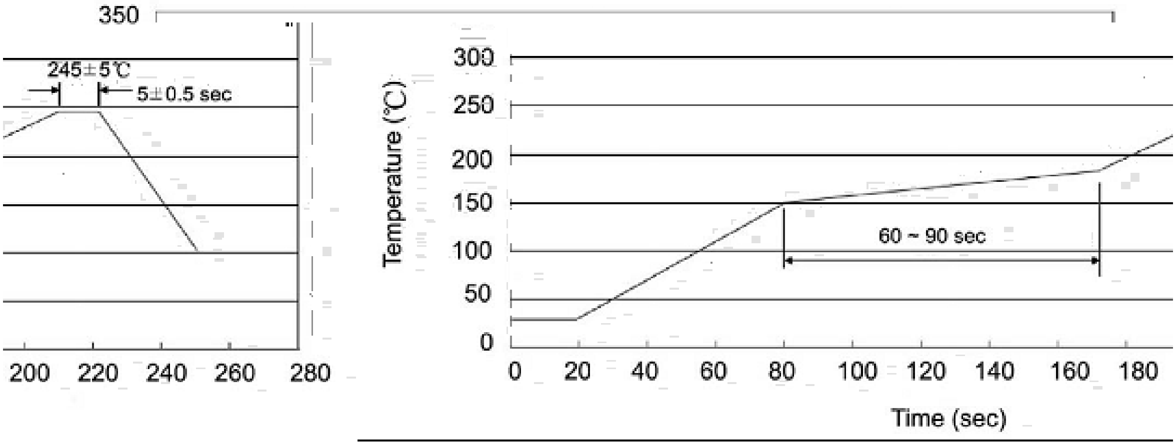


4953D

****

y

( ) /



	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