SOP-8 P

Dual P-CHANNEL MOSFET in a SOP-8 Plastic Package .

Dual P-CHANNEL

VDS(V)=-30V

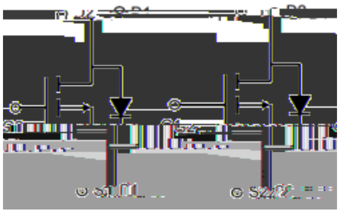
ID=-7.1A

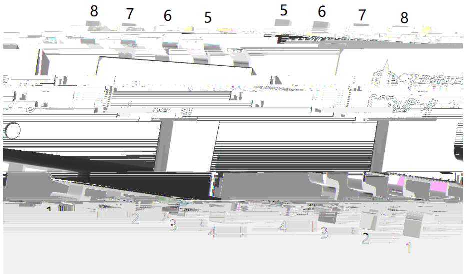
RDS(ON)<22mΩ(VGS=-10V)

RDS(ON)<35mΩ(VGS=-4.5V)

HF Product.

Power Management in Notebook Computer,Portable Equipment and Battery Powered Systems.





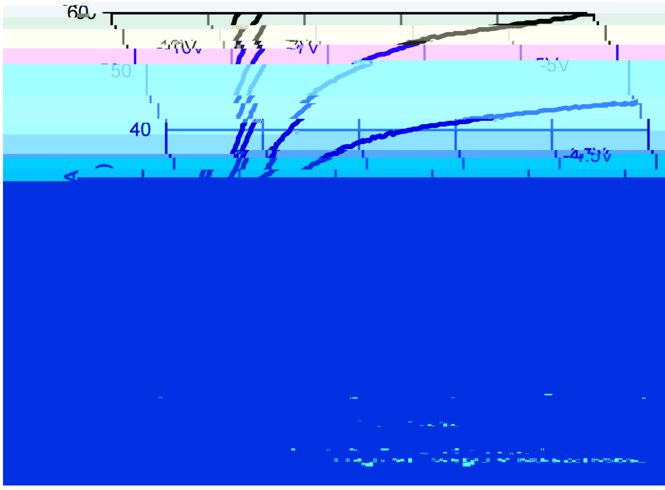
PIN1	S1	PIN 2	G1	PIN 3	S2	PIN 4	G2
PIN 5	D2	PIN 6	D2	PIN 7	D1	PIN 8	D1

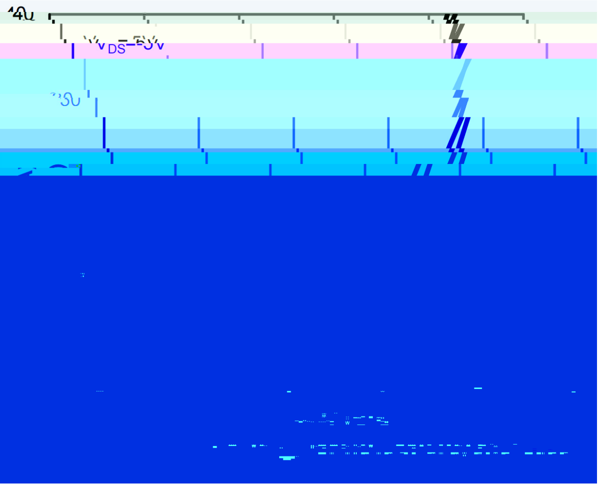
See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-30	V
Drain Current - Continuous		I_D	-7.1	A
Drain Current – Pulsed		I_{DM}	-40	A
Gate-Source Voltage		V_{GS}	± 20	V
Power Dissipation		P_D	2	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	152	mJ
Avalanche Current(L=0.5mH)		I_{AS}	-19.5	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	
Thermal resistance, junction - ambient	$t \leq 10s$	$R_{\theta JA}$	62.5	Ņ / W
	Steady-State		90	
Thermal resistance, junction - Lead	Steady-State	$R_{\theta JL}$	40	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA V_{GS}=0V	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V V_{GS}=0V			-1	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}= ±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_D=-250μA	-1	-1.3	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-20A		20	22	mΩ
		V_{GS}=-4.5V, I_D=-10A		28	35	
Diode Forward Voltage	V_{SD}	I_S=-1A, V_{GS}=0V			-1.2	V
Input Capacitance	C_{iss}	V_{DS}=-25V V				

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=-10V V_{DS}=-15V R_L=0.75Ω R_{GEN}=3Ω		11		ns
Turn-On Rise Time	t_r			5.6		
Turn-Off Delay Time	$t_{d(off)}$			28		
Turn-Off Fall Time	t_f			11		





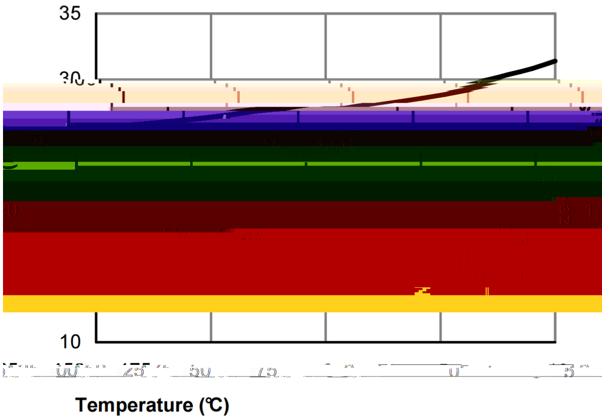


Figure 4: On-Resistance vs. Junction Temperature

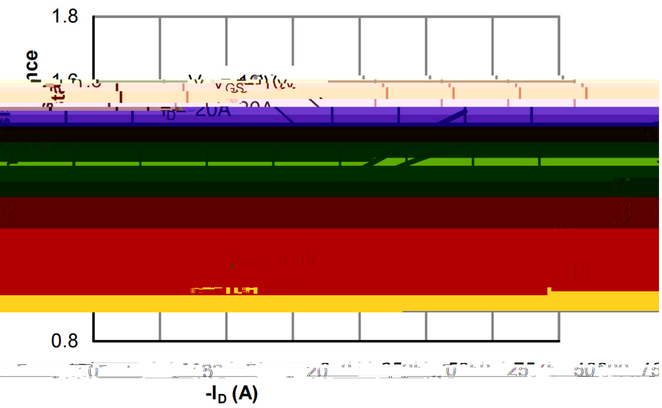
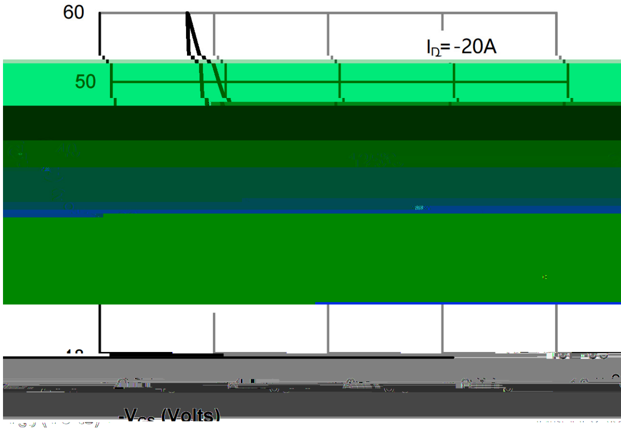
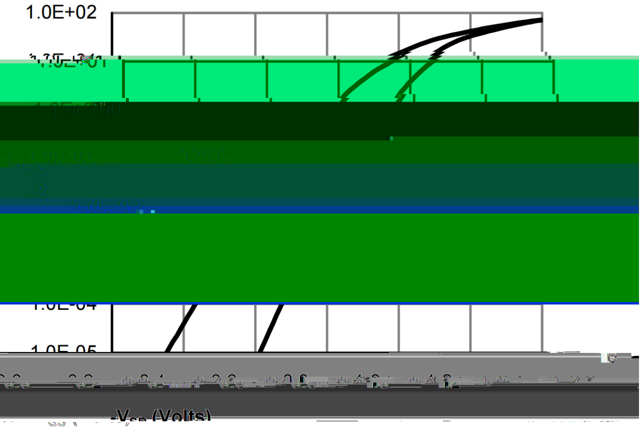


Figure 3: On-Resistance vs. Drain Current and Gate Voltage





/

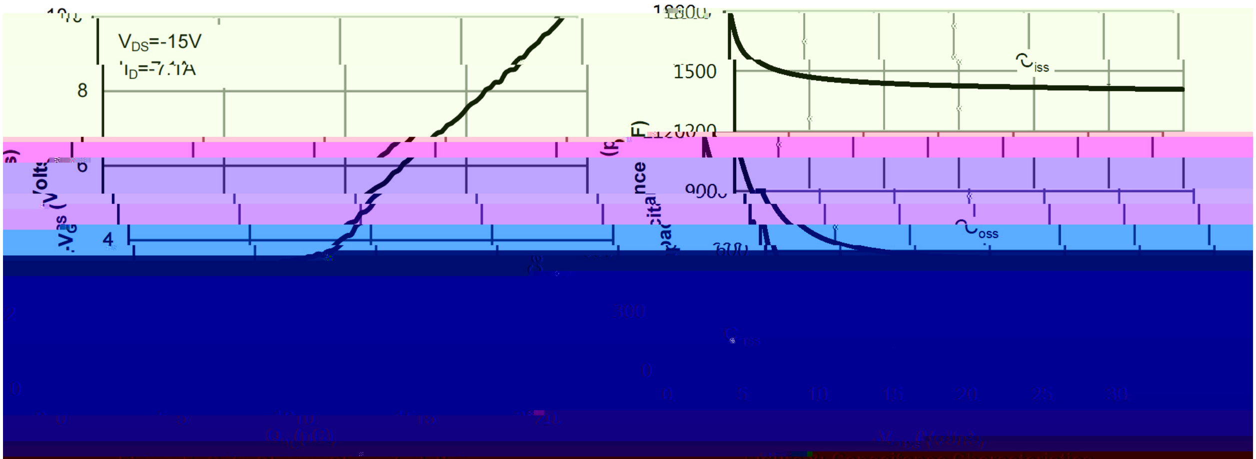
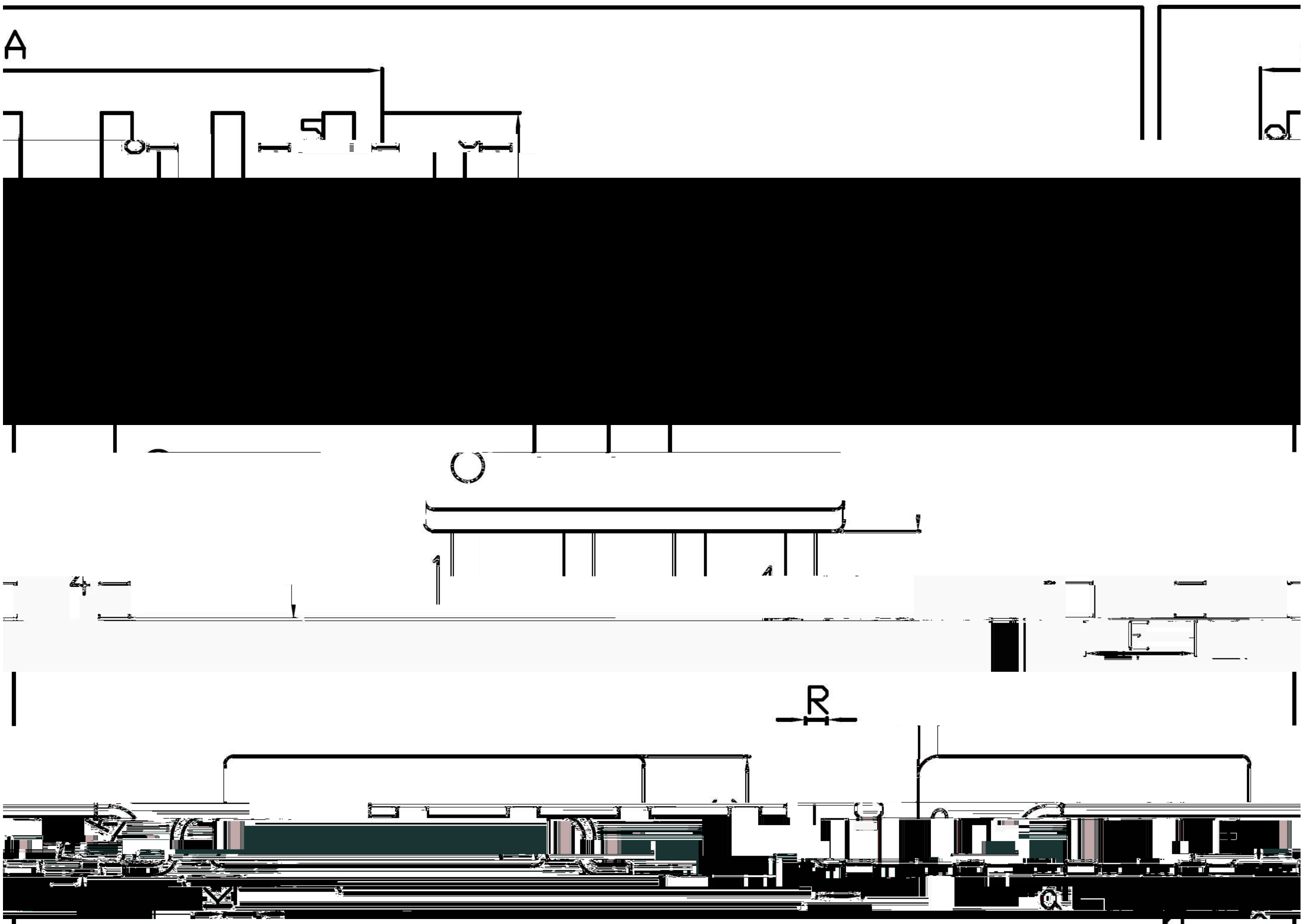


Figure 7. Gate Charge Characteristics

Figure 8. Capacitance Characteristics

[illegible] Unit:mm [illegible]



Symbol	Dimensions In Millimeters			Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.		Min.	Typ.	Max.
A	[illegible]	4.71	5.10	C	[illegible]	1.25	1.75
[illegible]	0.70	[illegible]	[illegible]	[illegible]	0.002	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Temperature Profile for IR Reflow Soldering(Pb-Free)

1 150 180 60 90sec;
2 245±5 5±0.5sec;
3 2 10 /sec.

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

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

/ REEL

Păckage TyPaese ª ȯ ź ʒ ŋ o l