SOP-8 N MOS

N-Channel Enhancement Mode Field Effect Transistor in a SOP-8 Plastic Package.

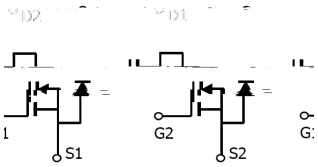
V_{DS}(V)=30V I_D=6.9A

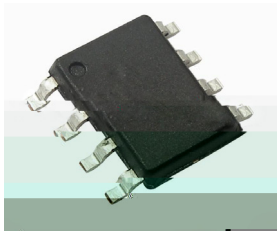
$R_{DS(ON)}$ <32mΩ(V_{GS}=10V)

$R_{DS(ON)}$ <36mΩ(V_{GS}=4.5V)

$R_{DS(ON)}$ <52mΩ(V_{GS}=2.5V)

Power Management in Notebook computer, Portable Equipment and Battery powered systems and this device is suitable for use as a load switch or in PWM applications.





PIN1 S2 PIN 2 G2 PIN 3 S1 PIN 4 G1

PIN 5 D1 PIN 6 D1 PIN 7 D2 PIN 8 D2

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current[A]	I_D (T_a=25°C)	6.9	A
	I_D (T_a=70°C)	5.8	A
Pulsed Drain Current[B]	I_{DM}	40	A
Power Dissipation for Single Operation[A]	P_D (T_a=25)	2.0	W
	P_D (T_a=70)	1.44	W
Junction and Storage Temperature Range	T_j,T_{stg}	-55 +150	
Thermal Resistance-Junction to Ambient[A]	$R_{\theta JA}$ t 10s	62.5	/W
	$R_{\theta JA}$	110	/W
Maximum Junction-to-Lead[C]	$R_{\theta JL}$	40	/W

Note:

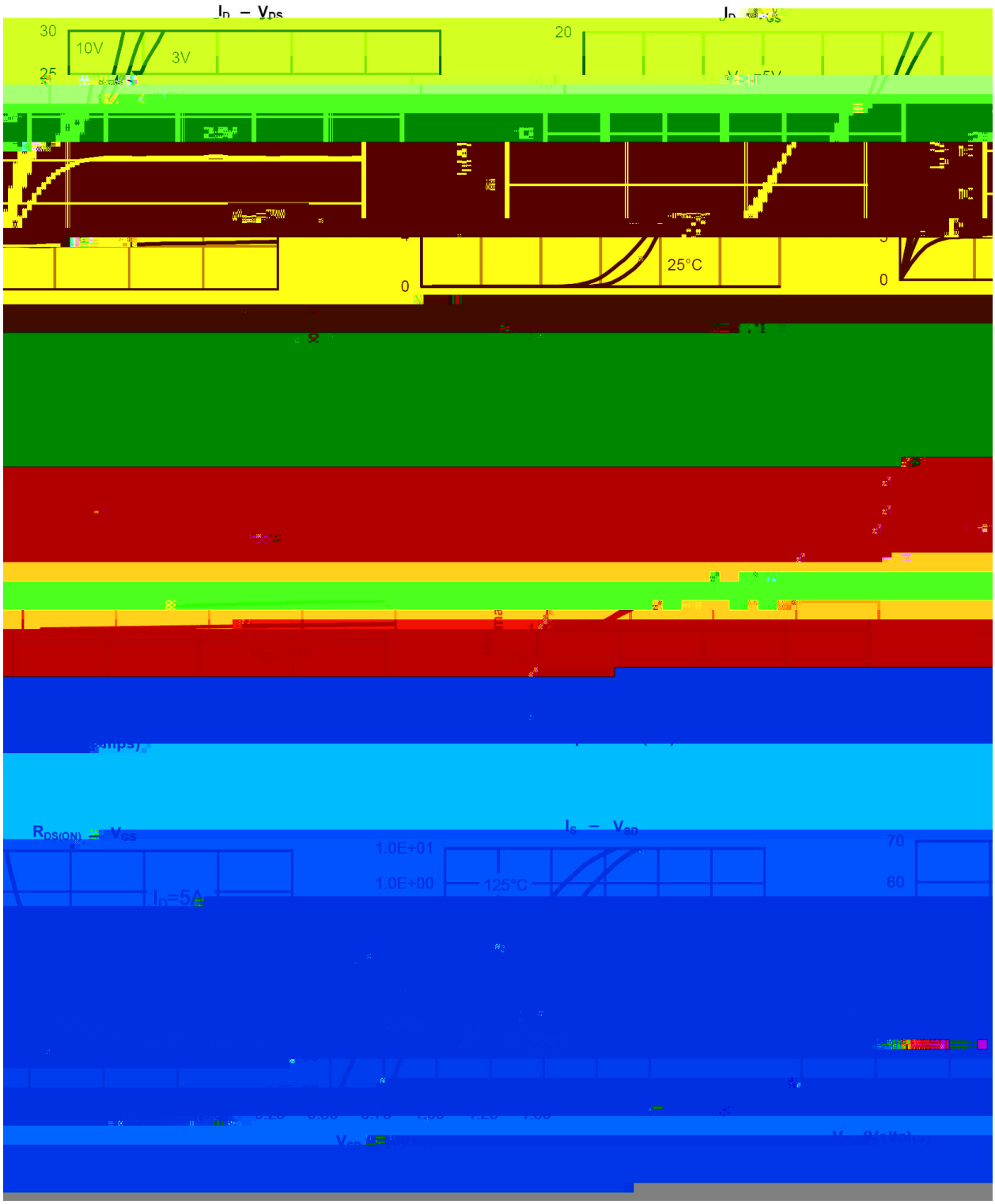
A:The value of $R_{\theta JA}$ is measured with the device mounted on 1in^2 FR-4 board with 2oz. Copper, in a still air environment with T_A=25°C. The value in any a given application depends on the user's specific board design. The current rating is based on the t ≤ 10s thermal resistance rating.

B: Repetitive rating, pulse width limited by junction temperature.

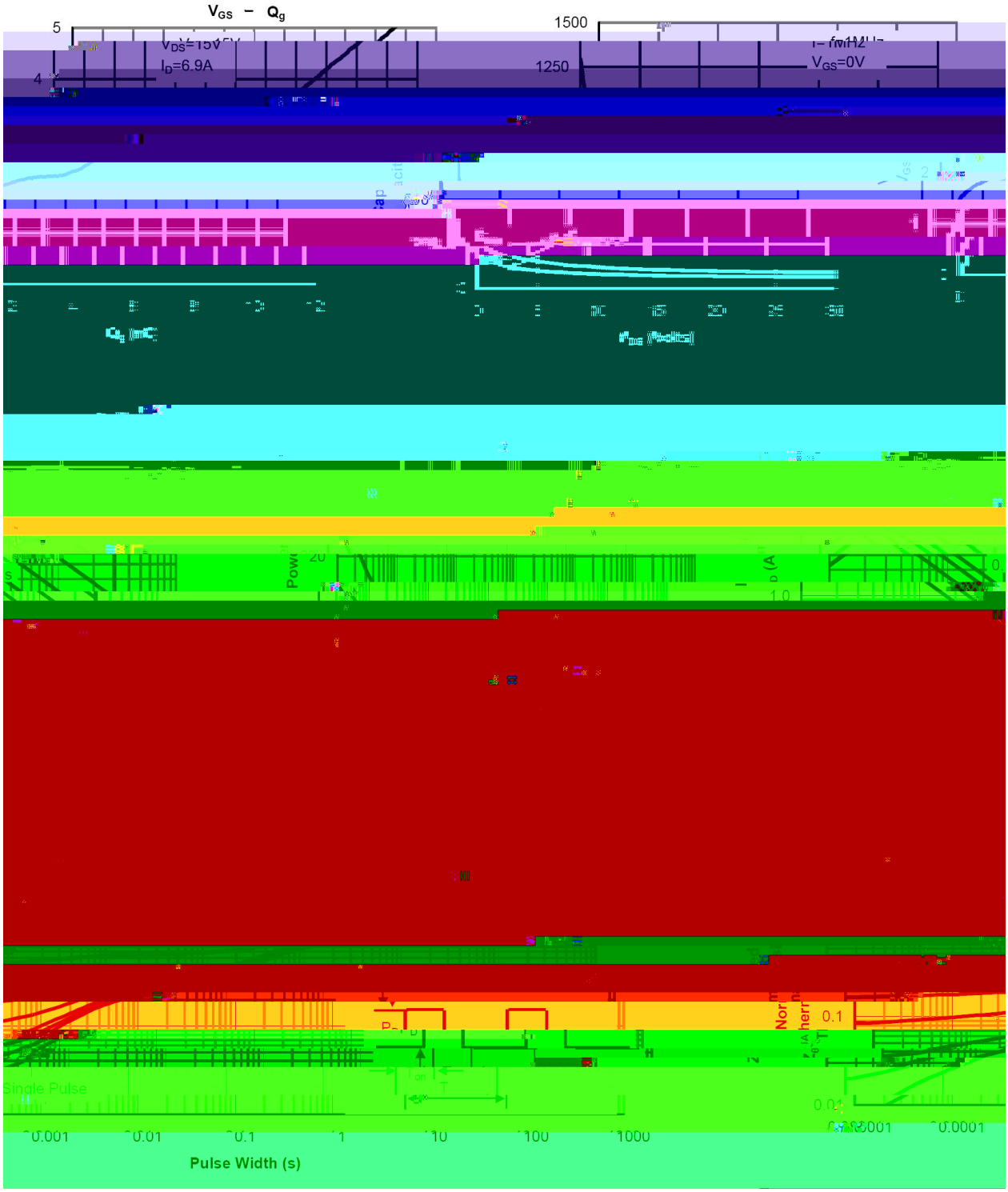
C. The $R_{\theta JA}$ is the sum of the thermal impedance from junction to lead $R_{\theta JL}$ and lead to ambient.

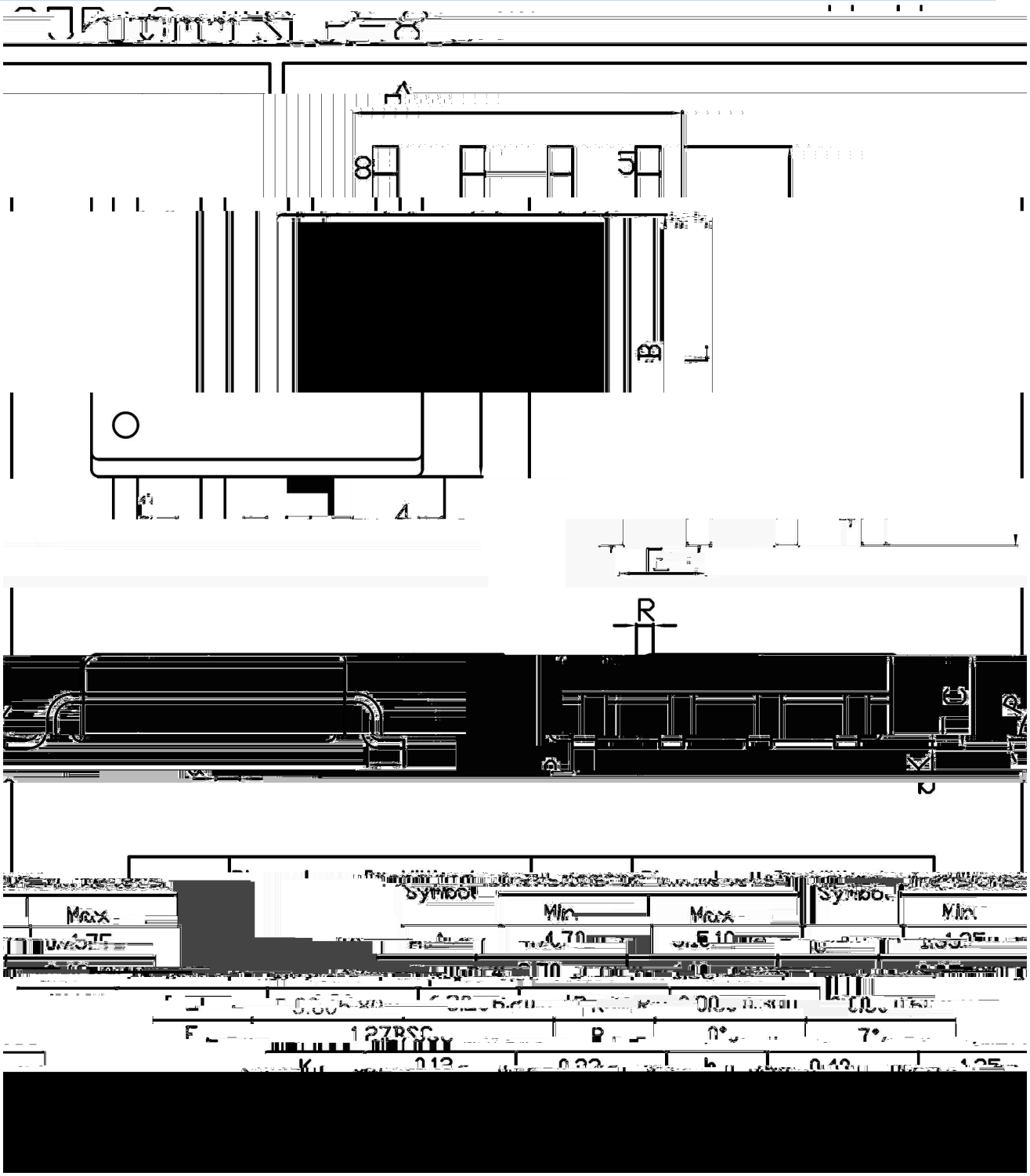
D. The static characteristics in Figures 1 to 6 are obtained using 80 μs pulses, duty cycle 0.5% max.

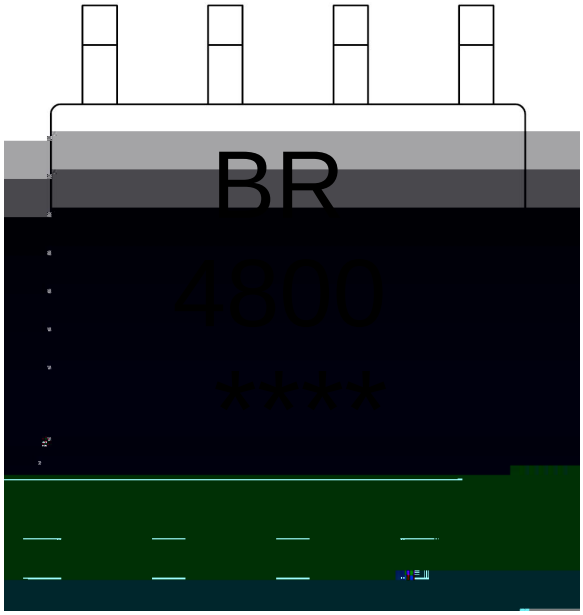
E. These tests are performed with the device mounted on 1 in^2 FR-4 board with 2oz. Copper, in a still air environment with T_A=25°C. The SOA curve provides a single pulse rating.


30
10V
3V
25
20
25°C
0
0
1.0E+01
1.0E+00
125°C
70
60

/


VGS – Qg
5
4
VDS=15V
ID=6.9A
1500
1250
VGS=0V
Single Pulse
0.001
0.01
0.1
1
10
100
1000
Pulse Width (s)


R
Symbol
Min
Max
Symbol
Min
Max
1.70
5.10
1.27BSC
0°
7°



BR

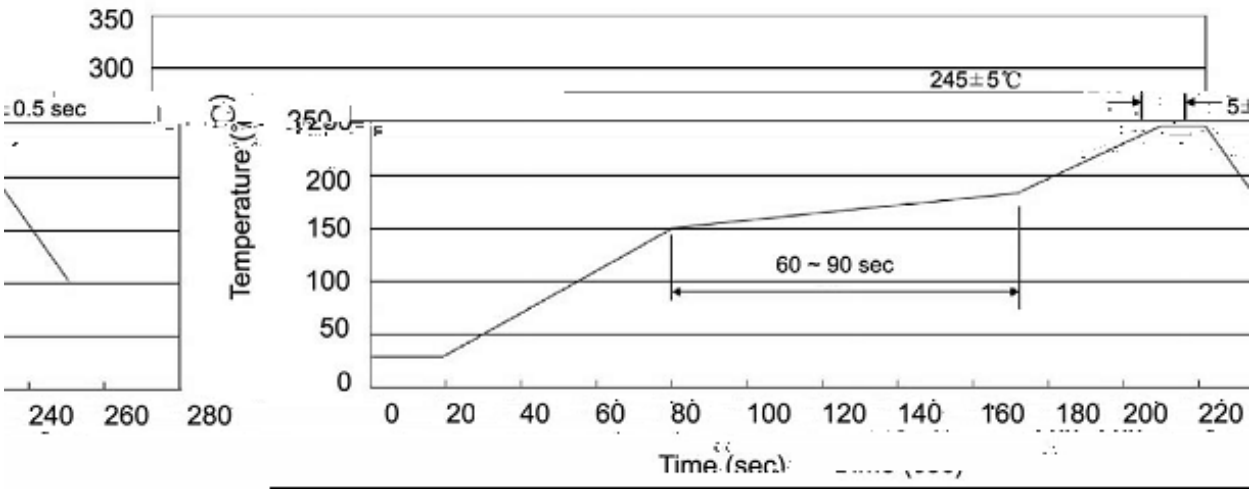
4800

****

Note:

BR:	Company Code.
4800:	Product Type
****:	Lot No. Code, code change with Lot No.

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 Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm^3)