

Rev. D Oct.-2018

SOP-8 N MOS

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

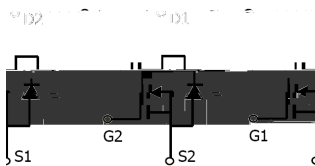
$V_{DS}(V)=30V$ $I_D=6.9A$

$R_{DS(ON)} < 32m$ ($V_{GS}=10V$)

$R_{DS(ON)} < 36m$ ($V_{GS}=4.5V$)

$R_{DS(ON)} < 52m$ ($V_{GS}=2.5V$)

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.



PIN 1	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	$I_D (T_a=25^\circ\text{C})$	6.9	A
	$I_D (T_a=70^\circ\text{C})$	5.8	A
Pulsed Drain Current ^B	I_{DM}	40	A
Power Dissipation for Single Operation ^A	$P_D (T_a=25^\circ\text{C})$	2.0	W
	$P_D (T_a=70^\circ\text{C})$	1.44	W
Junction and Storage Temperature Range	T_j, T_{stg}	-55 +150	
Thermal Resistance-Junction to Ambient ^A	$R_{JA} \ t \ 10s$	62.5	/W
	R_{JA}	110	/W
Maximum Junction-to-Lead ^C	R_{JL}	40	/W

Note:

A: The value of R_{JA} is measured with the device mounted on 1in² FR-4 board with 2oz. Copper, in a still air environment with $T_A=25^\circ\text{C}$. 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.

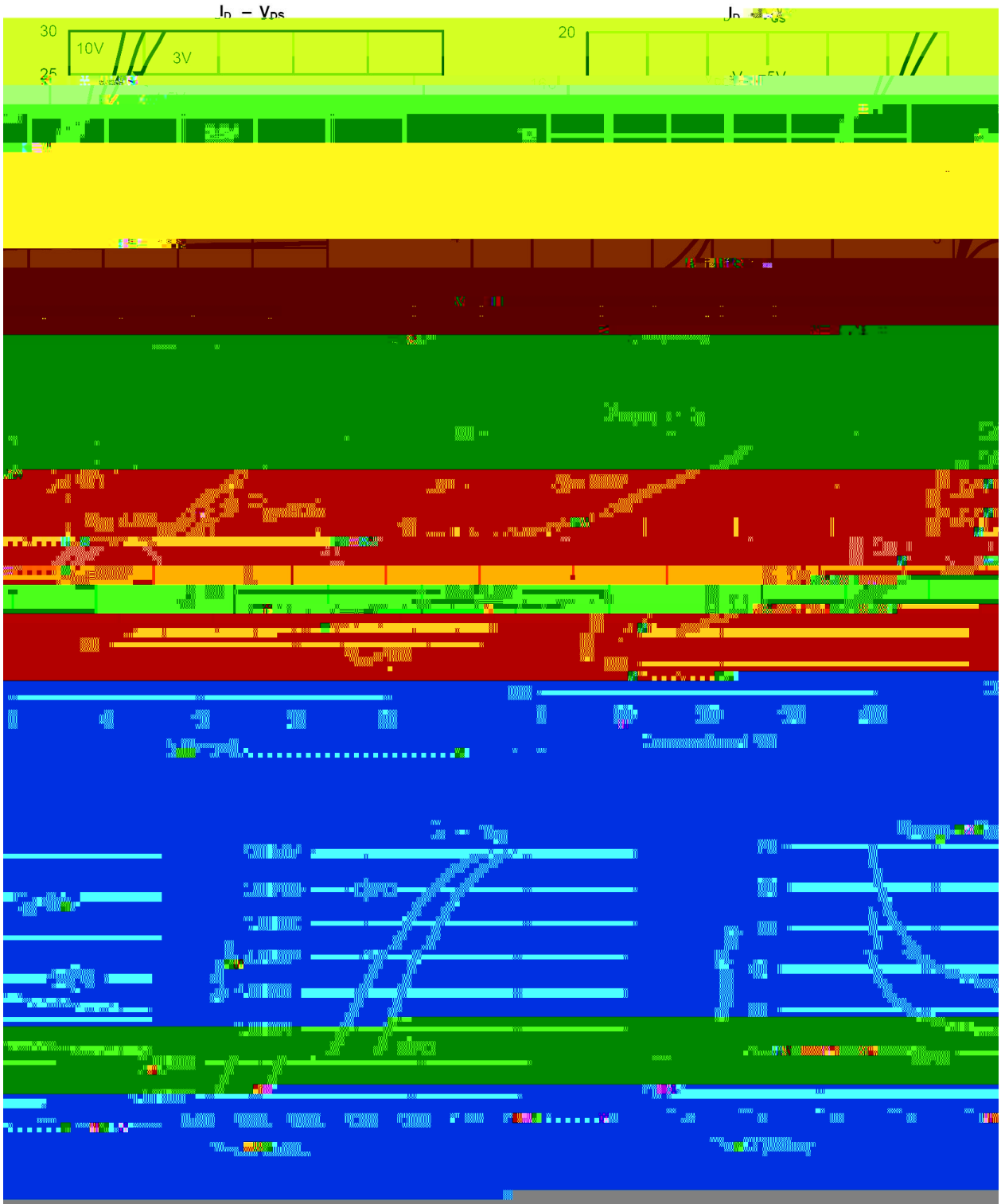
B: Repetitive rating, pulse width limited by junction temperature.

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

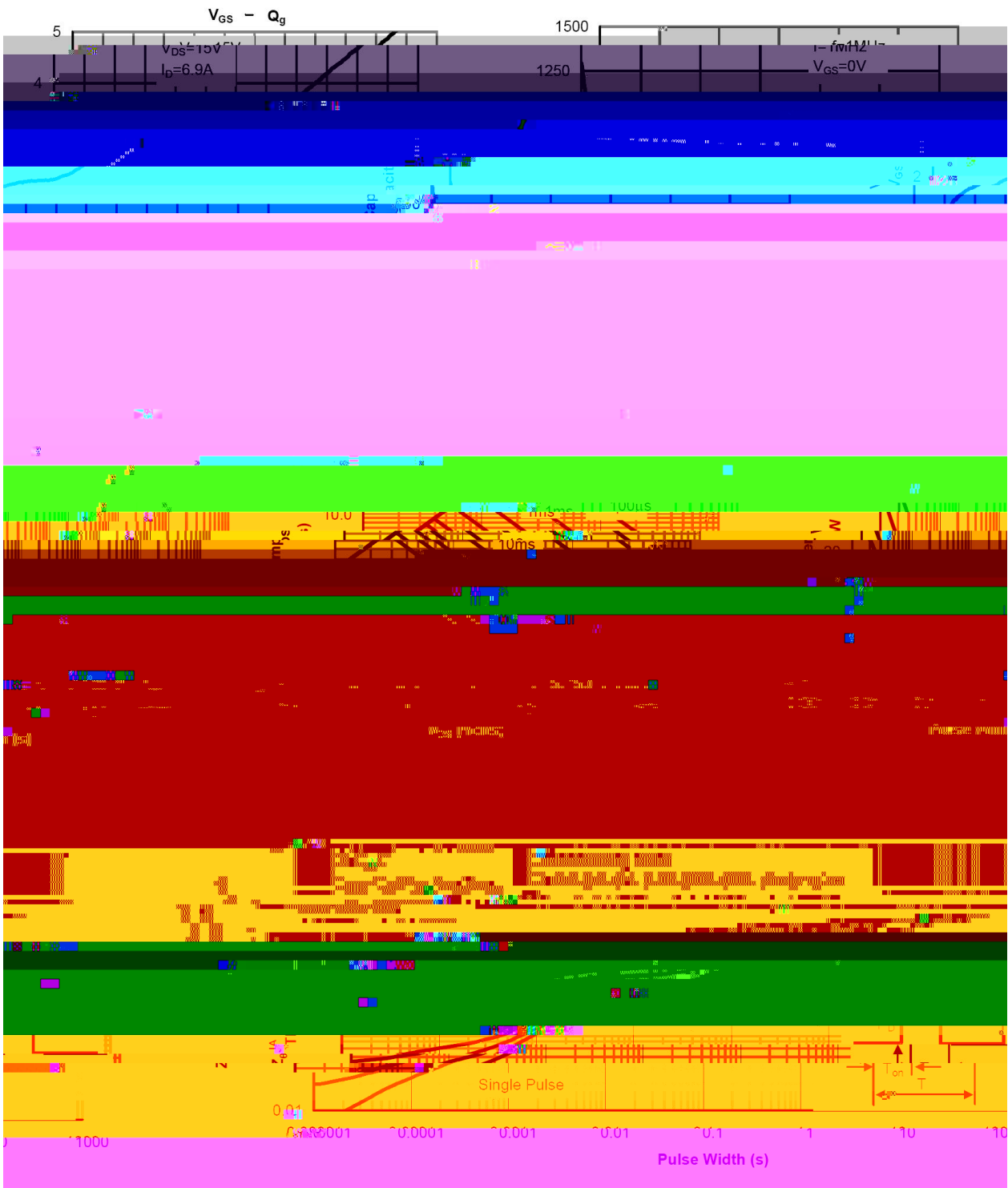
D. The static characteristics in Figures 1 to 6 are obtained using 80 μs pulses, duty cycle 0.5% max.

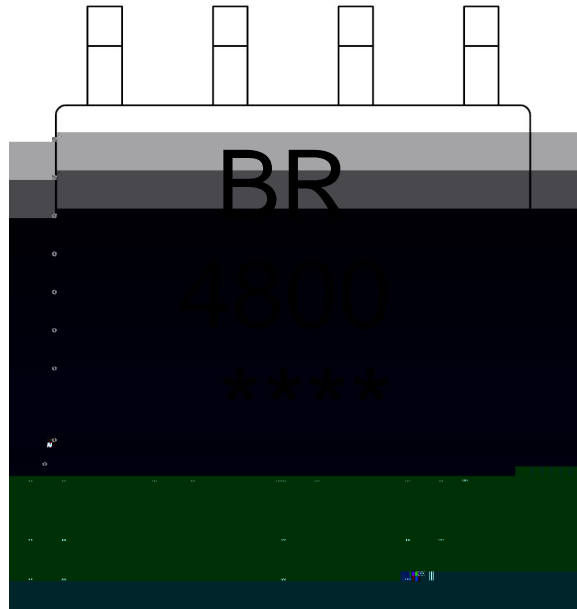
E. These tests are performed with the device mounted on 1 in² FR-4 board with 2oz. Copper, in a still air environment with $T_A=25^\circ\text{C}$. The SOA curve provides a single pulse rating.

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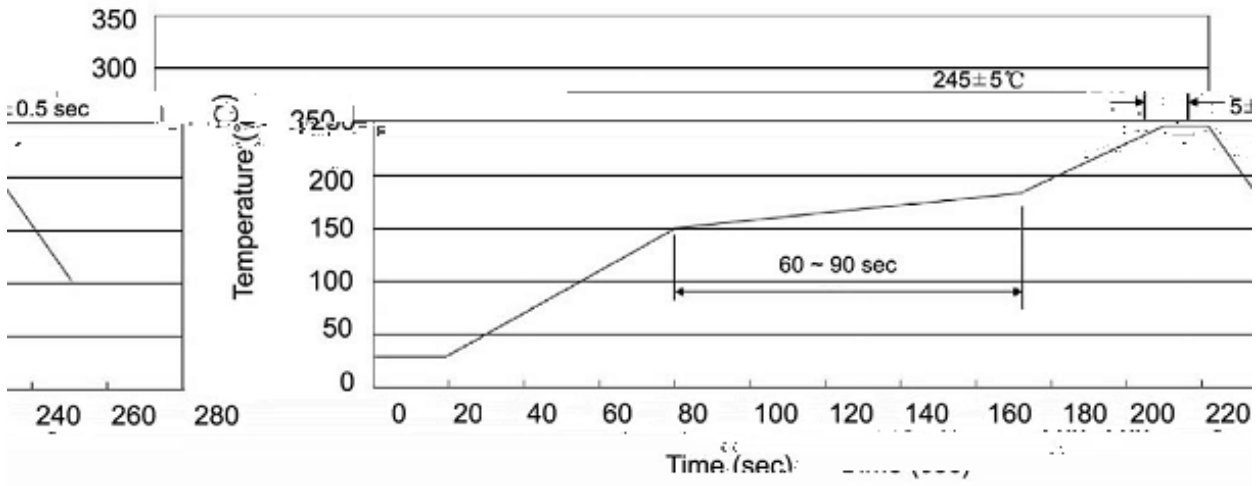
4800

Note:

BR: Company Code.

4800: Product Type

****: Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering (Pb-Free)

Note:

- | | | | | | |
|---|-------|-----|-------|----------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1. Preheating: 150~180 , Time: 60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 2. Peak Temp.: 245±5 , Duration: 5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 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)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOP/ESOP-8	4,000	2	8,000	6	48,000	13 ×12	360×360×50	380×335×366