## / Descriptions

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

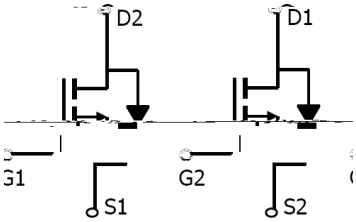
## / Features

$V_{DS}$(V)=-30V $I_D$=-5.0A
$R_{DS(ON)}$ <65mΩ($V_{GS}$=-10V)
$R_{DS(ON)}$ <75mΩ($V_{GS}$=-4.5V)

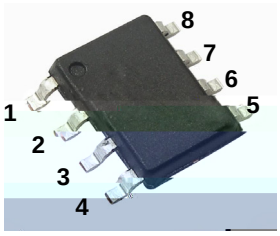
## / Applications

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.

## / Equivalent Circuit




## / Pinning




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

## / Marking

See Marking Instructions.

## / Absolute Maximum Ratings(Ta=25 )

| 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) | -5.0 | A |
| | $I_D$ ($T_a$=70°C) | -4.2 | A |
| Pulsed Drain Current[B] | $I_{DM}$ | -20 | A |
| Power Dissipation for Single Operation[A] | $P_D$ ($T_a$=25 ) | 2.0 | W |
| | $P_D$ ($T_a$=70 ) | 1.4 | 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 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.

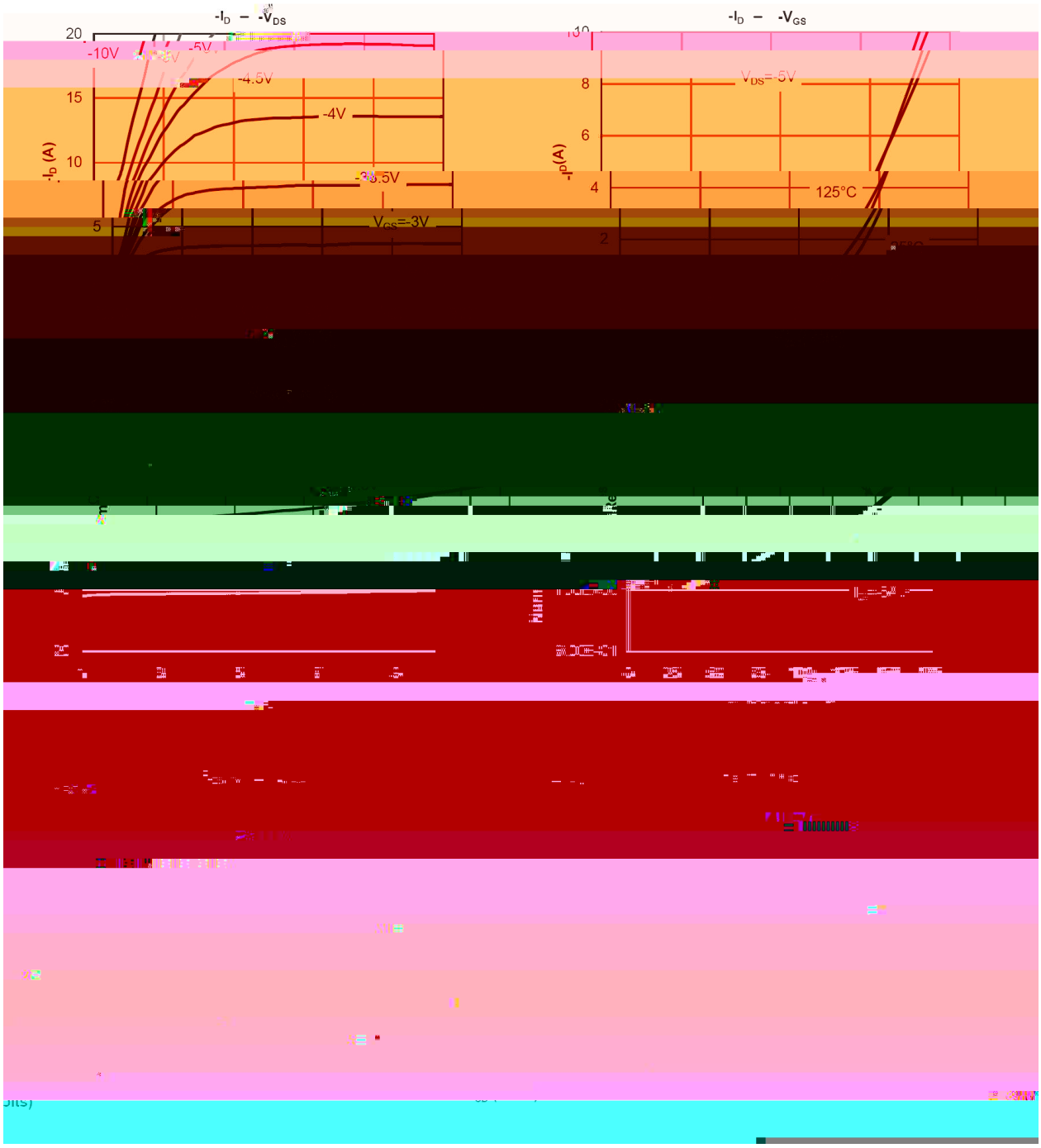
D. The static characteristics in Figures 1 to 6,12,14 are obtained using 80 µs pulses, duty cycle 0.5% max.

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.

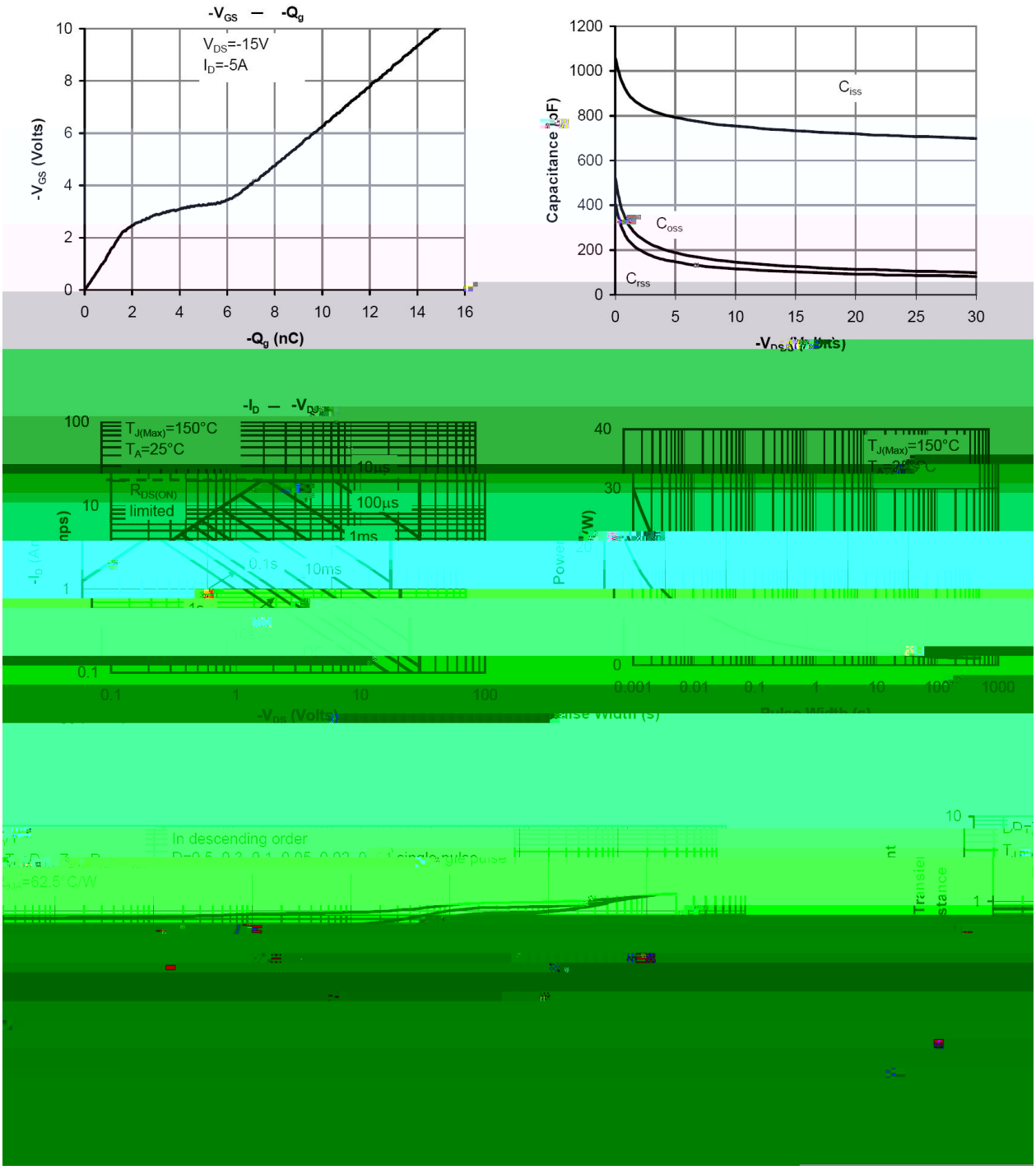
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| Parameter | Symbol | Test Conditions |
|---|---|---|

## / Electrical Characteristic Curve



## / Electrical Characteristic Curve



## / Package Dimensions



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