

/ Descriptions

SOP-8 P MOS

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

/ Features

$V_{DS}(V)=-30V$ $I_D=-5.0A$

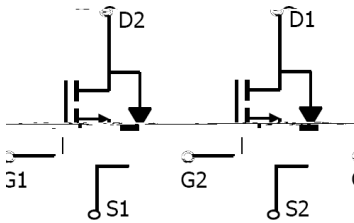
$R_{DS(ON)} < 65m\Omega (V_{GS}=-10V)$

$R_{DS(ON)} < 75m\Omega (V_{GS}=-4.5V)$

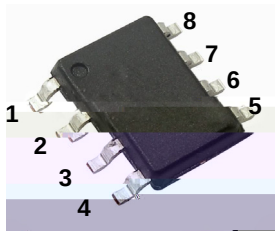
/ Applications

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	$I_D (T_a=25^{\circ}\text{C})$	-5.0	A
	$I_D (T_a=70^{\circ}\text{C})$	-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	$R_{\theta JA} \quad t \leq 10s$	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 1in² FR-4 board with 2oz. Copper, in a still air environment with $T_A=25^{\circ}\text{C}$. The value in any given application depends on the user's specific board design. The current rating is based on the $t \leq 10s$ thermal resistance rating.

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

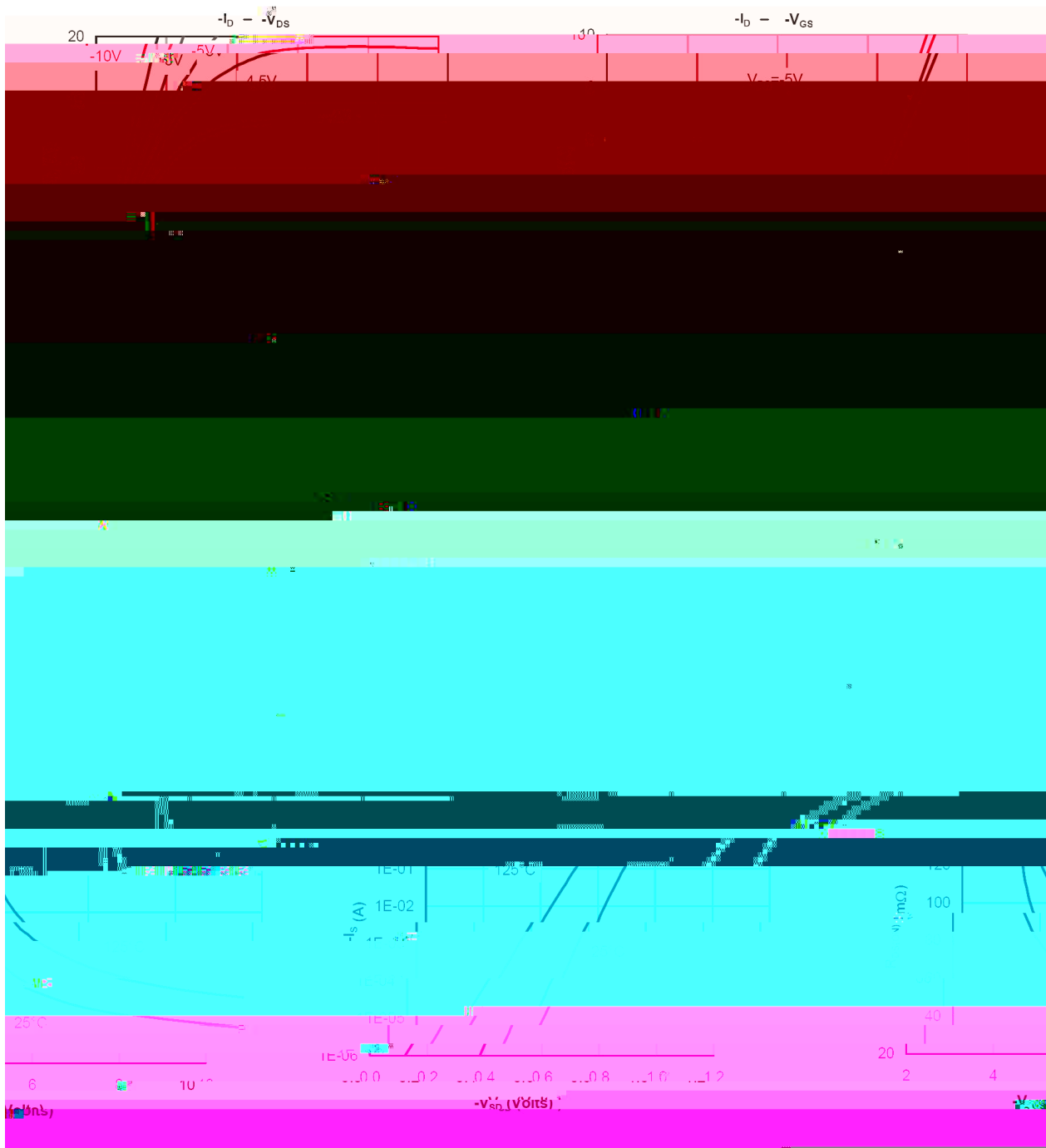
C. The $R_{\theta JA}$ is the sum of the thermal impedance from junction to lead $R_{\theta JL}$ and lead to ambient.

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

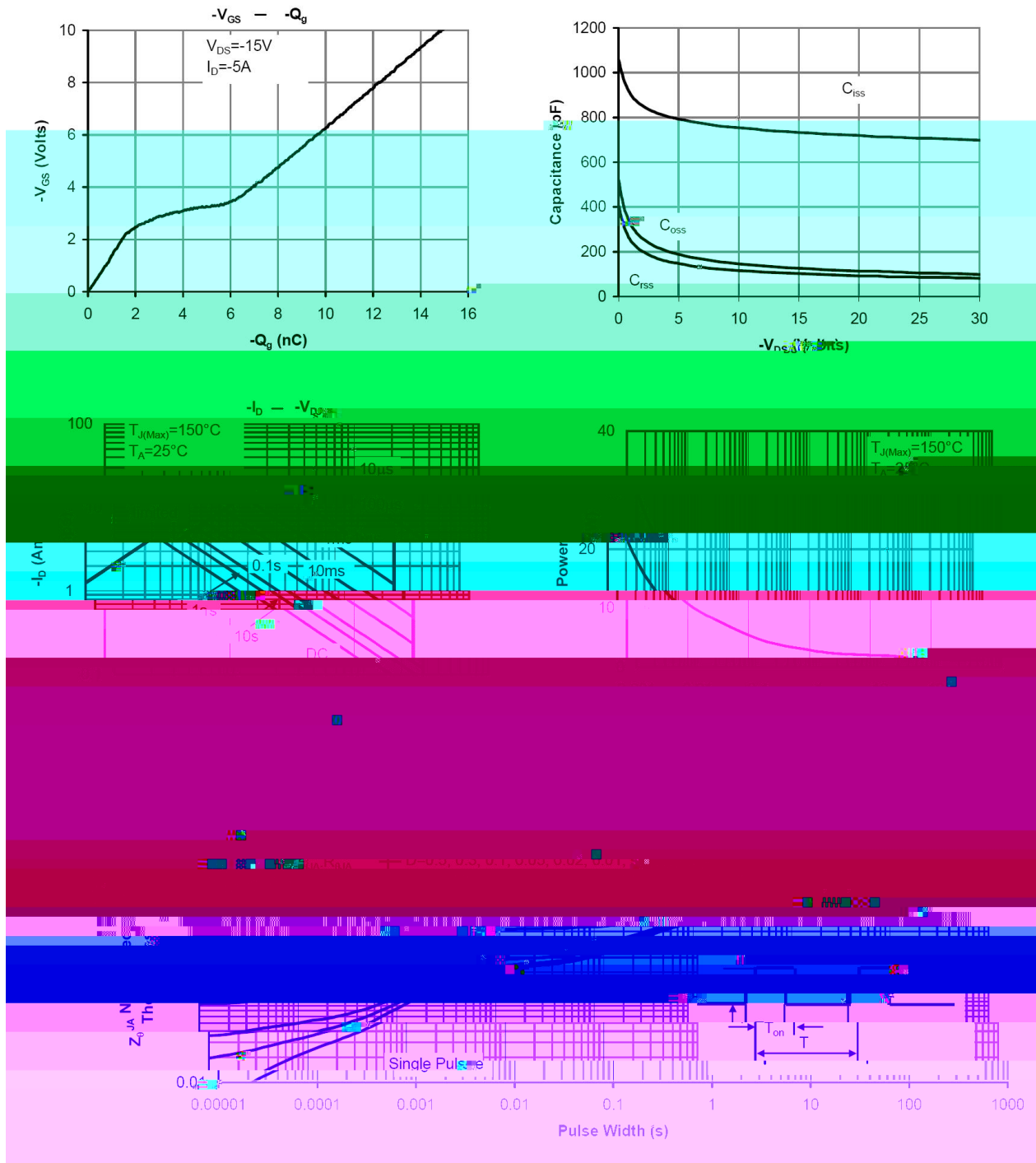
E. These tests are performed with the device mounted on 1 in² FR-4 board with 2oz. Copper, in a still air environment with $T_A=25^{\circ}\text{C}$. The SOA curve provides a single pulse rating.

Parameter	Symbol	Test Conditions	Â 4 ›
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/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Package Dimensions



BRCS4803SC
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