

Main Product Characteristics:

V_{DSS}	100V
$R_{DS(on)}$	5 (typ.)
I_D	0.17A

Features and Benefits:

Description:

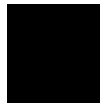
Absolute max Rating:

Symbol	Parameter	Max.	Units
$I_D @ TC = 25^\circ C$	Continuous Drain Current, $V_{GS} @ 10V$	0.17	

Electrical Characterizes @ $T_A=25$ unless otherwise specified

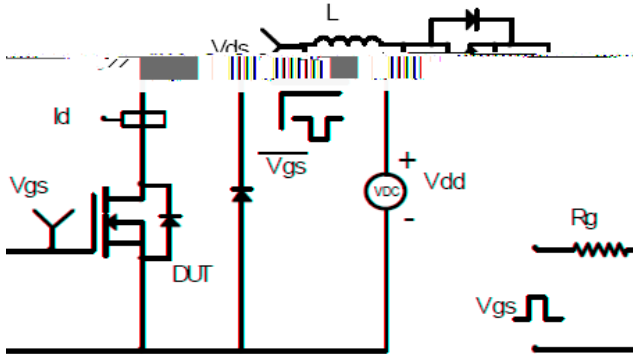
Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
$V_{(BR)DSS}$	Drain-to-Source breakdown voltage	100			V	$V_{GS} = 0V, I_D 6 +.)$
$R_{DS(on)}$	Static Drain-to-Source on-resistance		5	6		$V_{GS}=10V, I_D =100mA$
$V_{GS(th)}$	Gate threshold voltage	0.8		2	V	$V_{DS} = V_{GS}, I_D =1mA$
I_{DSS}	Drain-to-Source leakage current			15		$V_{DS} =100V, V_{GS} = 0V$
I_{GSS}	Gate-to-Source forward leakage			50	nA	$V_{GS} =20V$
				-50		$V_{GS} = -20V$
$t_{d(on)}$	Turn-on delay time		20		ns	$V_{GS}=10V, V_{DS} =30V,$ $R_{GEN}=50$
$t_{d(off)}$	Turn-Off delay time		40			
C_{iss}	Input capacitance		20		pF	$V_{GS} = 0V,$ $V_{DS} = 25V,$ 6 1MHz
C_{oss}	Output capacitance		9			
C_{rss}	Reverse transfer capacitance		4			

Source-Drain Ratings and Characteristics

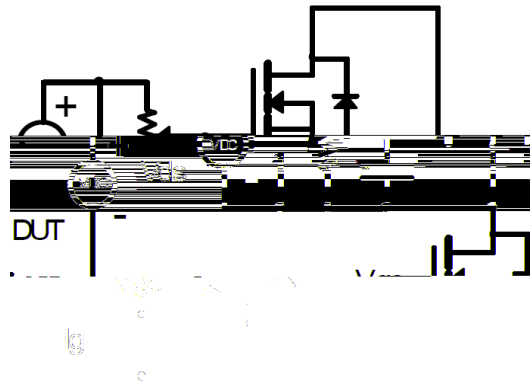
Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
I_S	Continuous Source Current (Body Diode)			0.17	A	MOSFET symbol showing the integral reverse p-n junction diode. 
I_{SM}	Pulsed Source Current (Body Diode)			0.68	A	
V_{SD}	Diode Forward Voltage			1.3	V	

Test Circuits and Waveforms

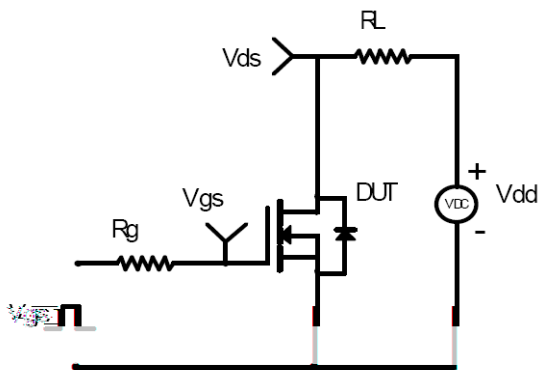
EAS Test Circuit:



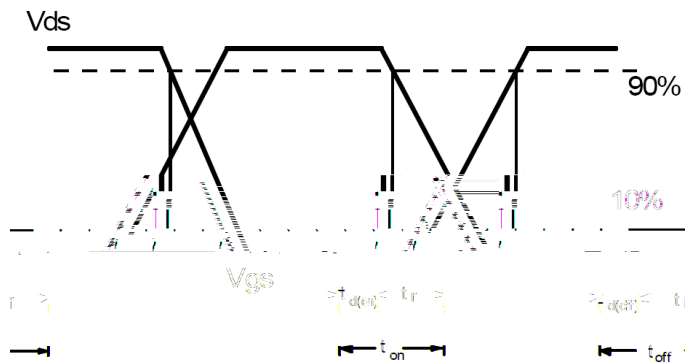
Gate Charge Test Circuit:



Switching Time Test Circuit:



Switching Waveforms:



Notes:

The maximum current rating is limited by bond-wires.

Repetitive rating; pulse width limited by max. junction temperature.

The power dissipation PD is based on max. junction temperature, using junction-to-case thermal resistance.

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

Typical Electrical and Thermal Characteristics

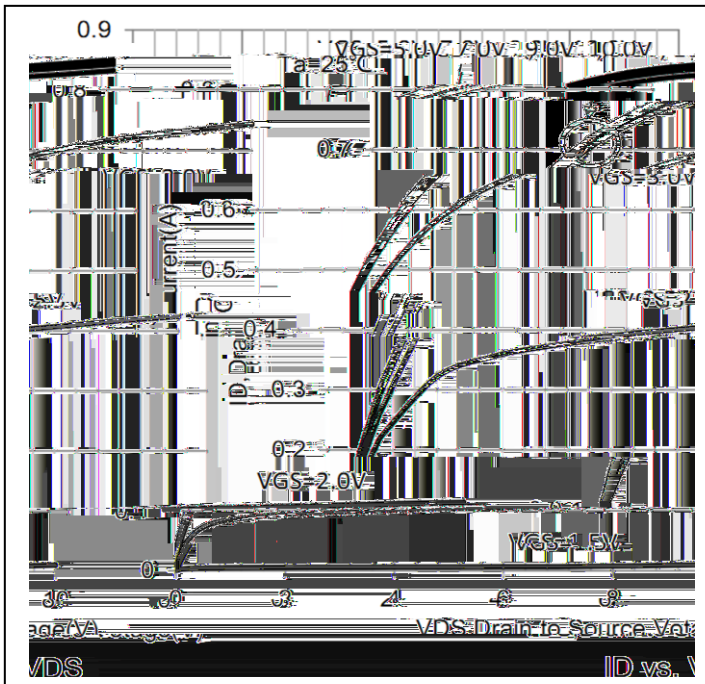


Figure 1. Typical Output Characteristics

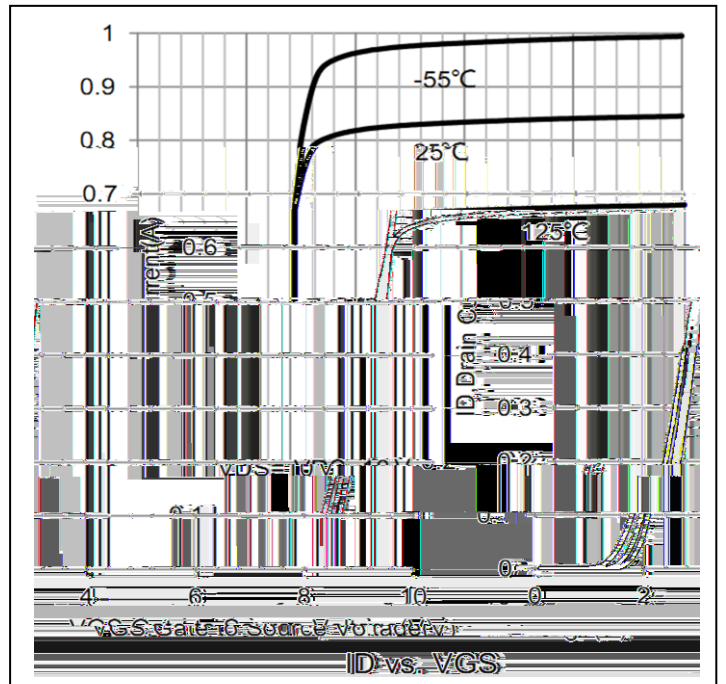


Figure 2. Typical Transfer Characteristics

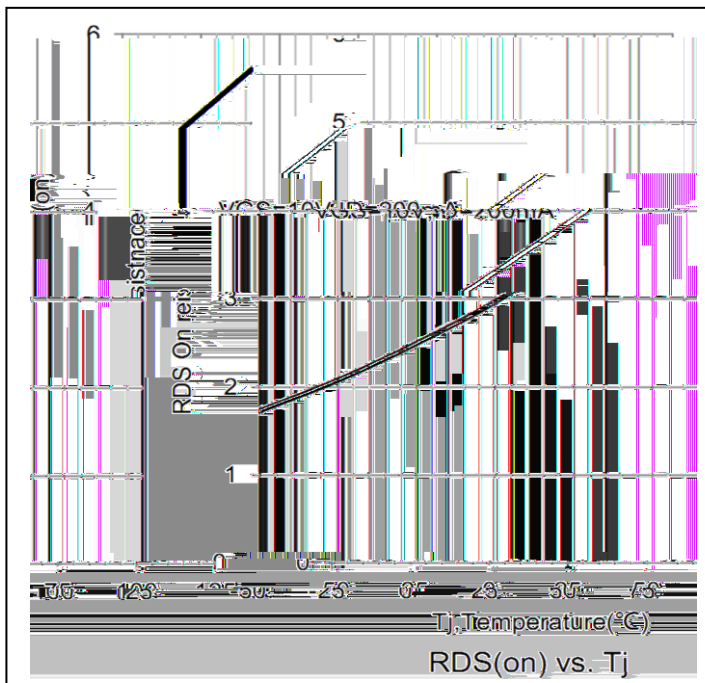


Figure 3. Normalized On-Resistance vs. Case Temperature

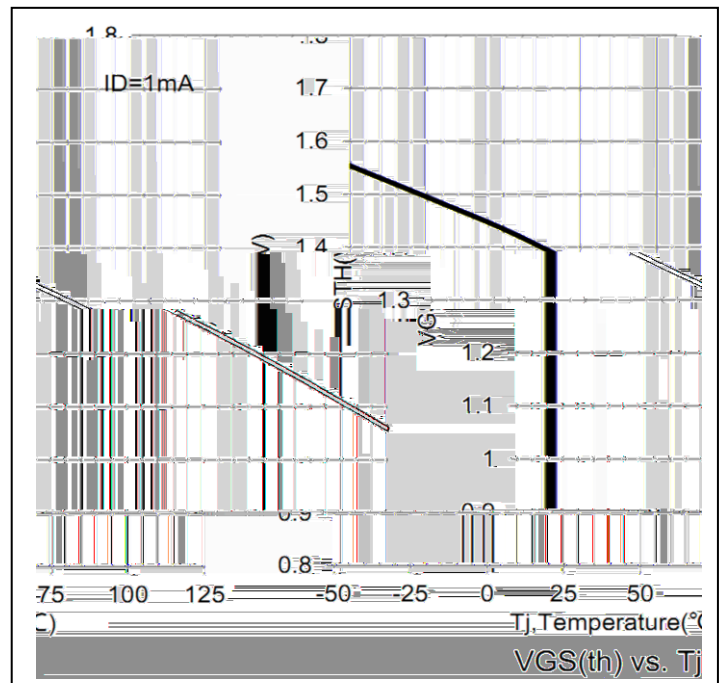
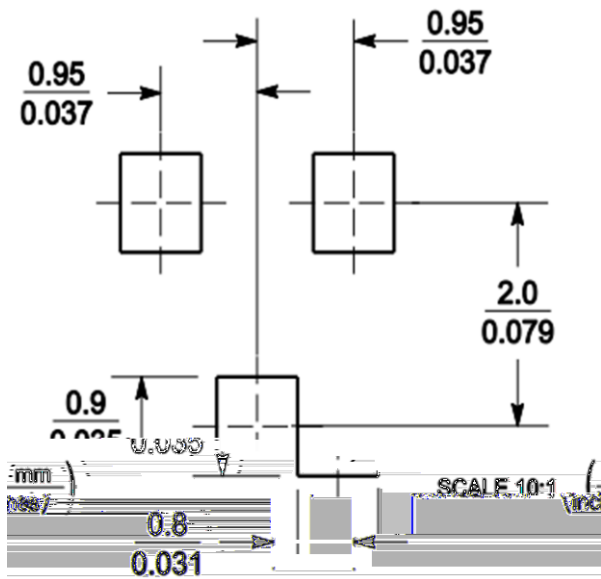
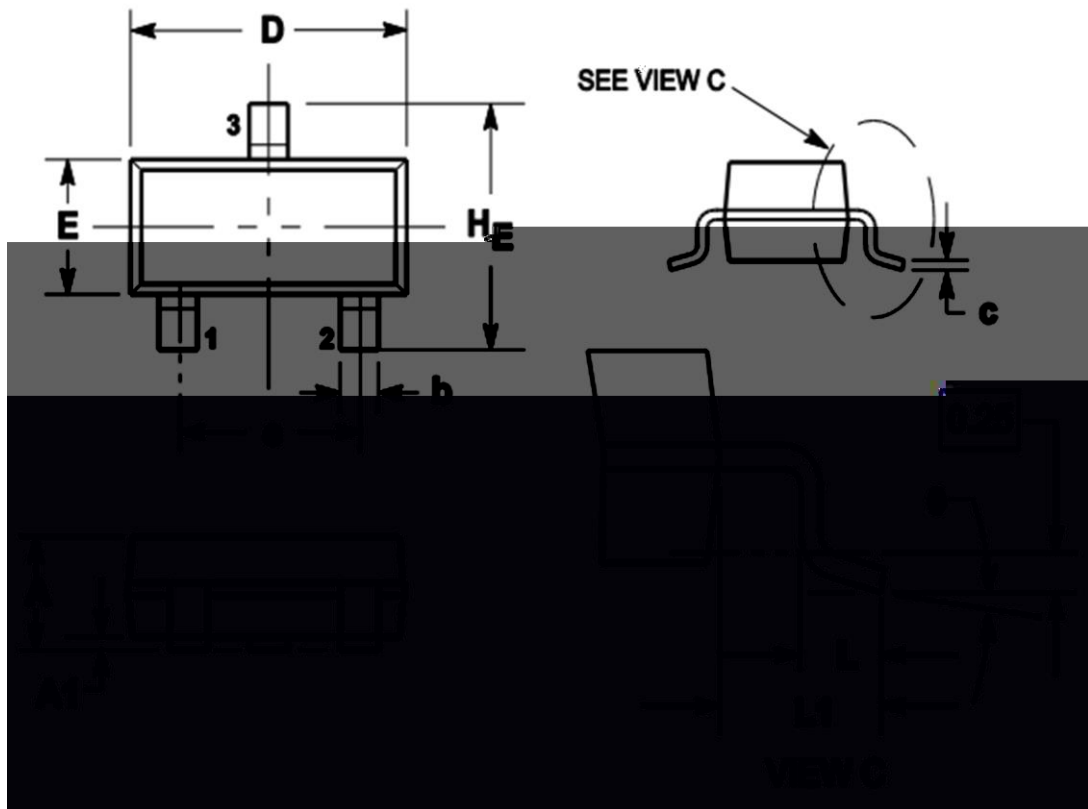


Figure 4. Gate to source cut-off voltage

Mechanical Data



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
1	0.600	0.610	0.611	0.0236	0.0240	0.0241
2	0.600	0.610	0.611	0.0236	0.0240	0.0241
3	0.600	0.610	0.611	0.0236	0.0240	0.0241
4	0.600	0.610	0.611	0.0236	0.0240	0.0241
5	0.600	0.610	0.611	0.0236	0.0240	0.0241
6	0.600	0.610	0.611	0.0236	0.0240	0.0241
7	0.600	0.610	0.611	0.0236	0.0240	0.0241
8	0.600	0.610	0.611	0.0236	0.0240	0.0241
9	0.600	0.610	0.611	0.0236	0.0240	0.0241
10	0.600	0.610	0.611	0.0236	0.0240	0.0241
11	0.600	0.610	0.611	0.0236	0.0240	0.0241
12	0.600	0.610	0.611	0.0236	0.0240	0.0241
13	0.600	0.610	0.611	0.0236	0.0240	0.0241
14	0.600	0.610	0.611	0.0236	0.0240	0.0241
15	0.600	0.610	0.611	0.0236	0.0240	0.0241
16	0.600	0.610	0.611	0.0236	0.0240	0.0241
17	0.600	0.610	0.611	0.0236	0.0240	0.0241
18	0.600	0.610	0.611	0.0236	0.0240	0.0241
19	0.600	0.610	0.611	0.0236	0.0240	0.0241
20	0.600	0.610	0.611	0.0236	0.0240	0.0241
21	0.600	0.610	0.611	0.0236	0.0240	0.0241
22	0.600	0.610	0.611	0.0236	0.0240	0.0241
23	0.600	0.610	0.611	0.0236	0.0240	0.0241
24	0.600	0.610	0.611	0.0236	0.0240	0.0241
25	0.600	0.610	0.611	0.0236	0.0240	0.0241
26	0.600	0.610	0.611	0.0236	0.0240	0.0241
27	0.600	0.610	0.611	0.0236	0.0240	0.0241
28	0.600	0.610	0.611	0.0236	0.0240	0.0241
29	0.600	0.610	0.611	0.0236	0.0240	0.0241
30	0.600	0.610	0.611	0.0236	0.0240	0.0241
31	0.600	0.610	0.611	0.0236	0.0240	0.0241
32	0.600	0.610	0.611	0.0236	0.0240	0.0241
33	0.600	0.610	0.611	0.0236	0.0240	0.0241
34	0.600	0.610	0.611	0.0236	0.0240	0.0241
35	0.600	0.610	0.611	0.0236	0.0240	0.0241
36	0.600	0.610	0.611	0.0236	0.0240	0.0241
37	0.600	0.610	0.611	0.0236	0.0240	0.0241
38	0.600	0.610	0.611	0.0236	0.0240	0.0241
39	0.600	0.610	0.611	0.0236	0.0240	0.0241
40	0.600	0.610	0.611	0.0236	0.0240	0.0241
41	0.600	0.610	0.611	0.0236	0.0240	0.0241
42	0.600	0.610	0.611	0.0236	0.0240	0.0241
43	0.600	0.610	0.611	0.0236	0.0240	0.0241
44	0.600	0.610	0.611	0.0236	0.0240	0.0241
45	0.600	0.610	0.611	0.0236	0.0240	0.0241
46	0.600	0.610	0.611	0.0236	0.0240	0.0241
47	0.600	0.610	0.611	0.0236	0.0240	0.0241
48	0.600	0.610	0.611	0.0236	0.0240	0.0241
49	0.600	0.610	0.611	0.0236	0.0240	0.0241
50	0.600	0.610	0.611	0.0236	0.0240	0.0241
51	0.600	0.610	0.611	0.0236	0.0240	0.0241
52	0.600	0.610	0.611	0.0236	0.0240	0.0241
53	0.600	0.610	0.611	0.0236	0.0240	0.0241
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55	0.600	0.610	0.611	0.0236	0.0240	0.0241
56	0.600	0.610	0.611	0.0236	0.0240	0.0241
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63	0.600	0.610	0.611	0.0236	0.0240	0.0241
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125	0.600	0.610	0.611	0.0236	0.0240	0.0241
126	0.600	0.610	0.611	0.0236	0.0240	0.0241
127	0.600	0.610	0.611	0.0236	0.0240	0.0241
128	0.600	0.610	0.611	0.0236	0.0240	0.0241
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137	0.600	0.610	0.611	0.0236	0.0240	0.0241
138	0.600	0.610	0.611	0.0236	0.0240	0.0241
139	0.600	0.610	0.611	0.0236	0.0240	0.0241
140	0.600	0.610	0.611	0.0236	0.0240	0.0241
141	0					

