

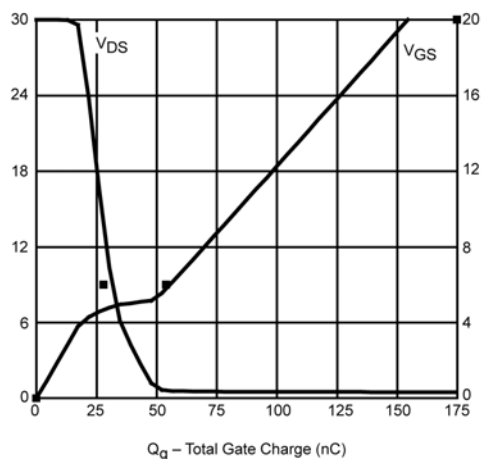
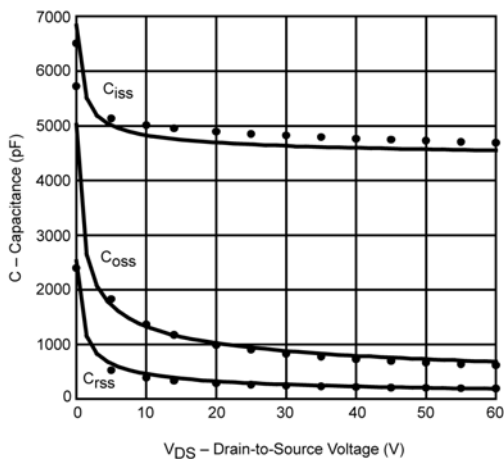
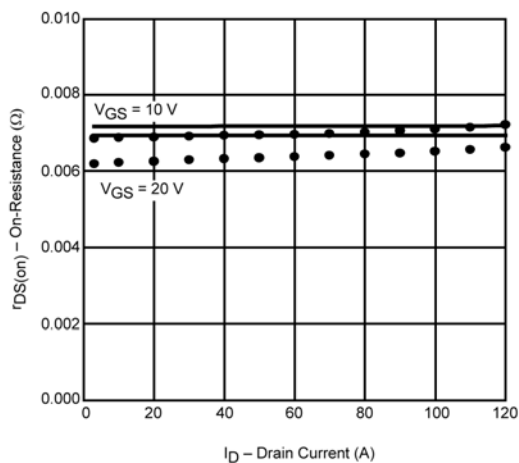
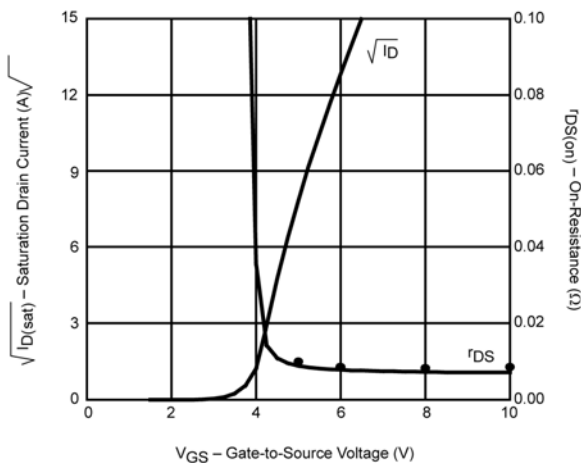
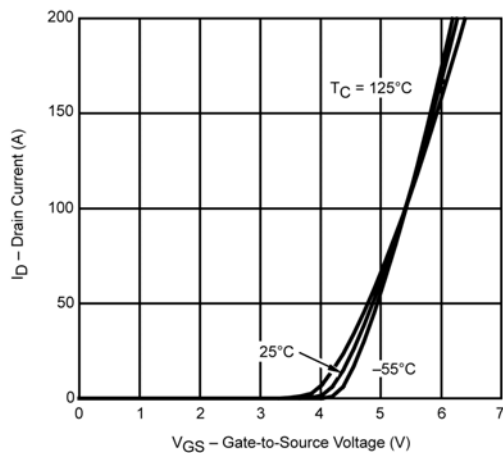
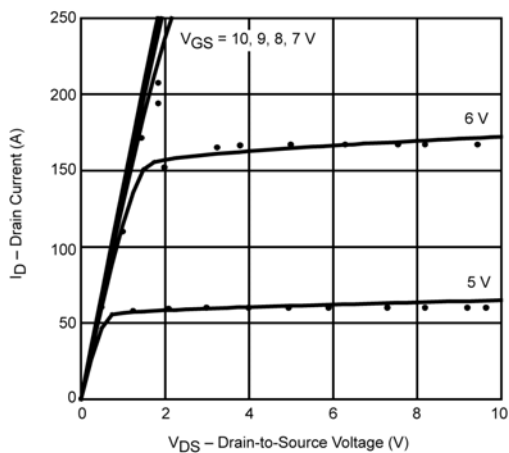
SPECIFICATIONS ($T_J = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)					
Parameter	Symbol	Test Condition	Simulated Data	Measured Data	Unit
Static					
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$, $I_D = 250\ \mu\text{A}$	3	3	V
On-State Drain Current ^a	$I_{D(on)}$	$V_{DS} = 5\ \text{V}$, $V_{GS} = 10\ \text{V}$	644		A
Drain-Source On-State Resistance ^a	$r_{DS(on)}$	$V_{GS} = 10\ \text{V}$, $I_D = 30\ \text{A}$	0.0072	0.007	Ω
		$V_{GS} = 10\ \text{V}$, $I_D = 30\ \text{A}$, $T_J = 125^\circ\text{C}$	0.011		
		$V_{GS} = 10\ \text{V}$, $I_D = 30\ \text{A}$, $T_J = 175^\circ\text{C}$	0.012		
Forward Transconductance ^a	g_{fs}	$V_{DS} = 15\ \text{V}$, $I_D = 30\ \text{A}$	75		S
Forward Voltage ^a	V_{SD}	$I_S = 75\ \text{A}$, $V_{GS} = 0\ \text{V}$	0.92	1	V
Dynamic^b					
Input Capacitance	C_{iss}	$V_{GS} = 0\ \text{V}$, $V_{DS} = 25\ \text{V}$, $f = 1\ \text{MHz}$	4659	4800	pF
Output Capacitance	C_{oss}		939	910	
Reverse Transfer Capacitance	C_{rss}		291	270	
Total Gate Charge ^c	Q_g	$V_{DS} = 30\ \text{V}$, $V_{GS} = 10\ \text{V}$, $I_D = 75\ \text{A}$	83	85	nC
Gate-Source Charge ^c	Q_{gs}		28	28	
Gate-Drain Charge ^c	Q_{gd}		26	26	
Turn-On Delay Time ^c	$t_{d(on)}$	$V_{DD} = 30\ \text{V}$, $R_L = 0.47\ \Omega$ $I_D \cong 75\ \text{A}$, $V_{GEN} = 10\ \text{V}$, $R_G = 2.5\ \Omega$	30	20	ns
Rise Time ^c	t_r		43	95	
Turn-Off Delay Time ^c	$t_{d(off)}$		54	65	
Fall Time ^c	t_f		67	20	
Reverse Recovery Time	t_{rr}	$I_F = 75\ \text{A}$, $di/dt = 100\ \text{A}/\mu\text{s}$	62	67	

Notes

a. Pulse test; pulse width $\leq 300\ \mu\text{s}$, duty cycle $\leq 2\%$.

b. Guaranteed by design, not subject to production testing.

c. Independent of operating temperature.

COMPARISON OF MODEL WITH MEASURED DATA ($T_J=25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Note: Dots and squares represent measured data.



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.