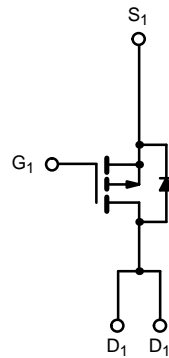
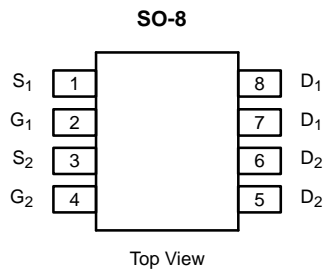




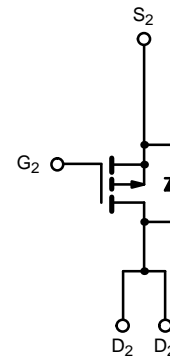
Dual P-Channel 60-V (D-S), 175 °C MOSFET

PRODUCT SUMMARY		
V_{DS} (V)	$r_{DS(on)}$ (Ω)	I_D (A)
-60	0.17 @ $V_{GS} = -10$ V	± 2.6
	0.26 @ $V_{GS} = -4.5$ V	± 2.1

175 °C Rated
Maximum Junction Temperature
TrenchFET®
Power MOSFETs



P-Channel MOSFET



P-Channel MOSFET

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)			
Parameter	Symbol	Limit	Unit
Drain-Source Voltage	V_{DS}	-60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current ($T_J = 175^\circ\text{C}$) ^a	$T_A = 25^\circ\text{C}$	± 2.6	A
	$T_A = 70^\circ\text{C}$	± 2.2	
Pulsed Drain Current	I_{DM}	± 15	
Continuous Source Current (Diode Conduction) ^a	I_S	-2	
Maximum Power Dissipation ^a	$T_A = 25^\circ\text{C}$	2.4	W
	$T_A = 70^\circ\text{C}$	1.7	
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-55 to 175	$^\circ\text{C}$

THERMAL RESISTANCE RATINGS				
Parameter	Symbol	Typ	Max	Unit
Junction-to-Ambient ^a	$t \leq 10$ sec		62.5	$^\circ\text{C/W}$
	Steady State	R_{thJA}	93	

Notes

a. Surface Mounted on 1" x 1" FR4 Board

For SPICE model information via the Worldwide Web: <http://www.vishay.com/www/product/spice.htm>



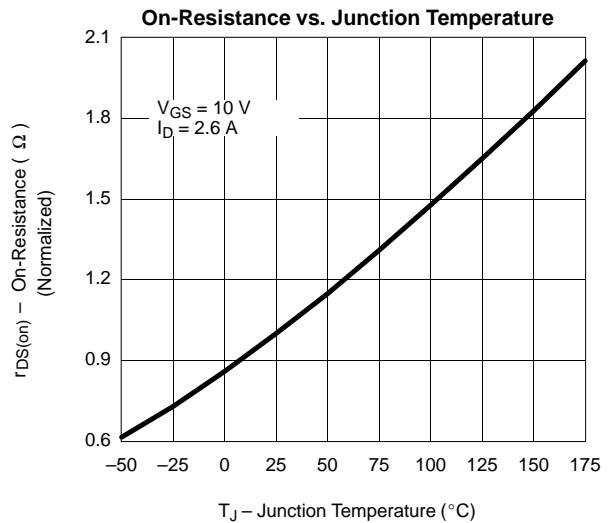
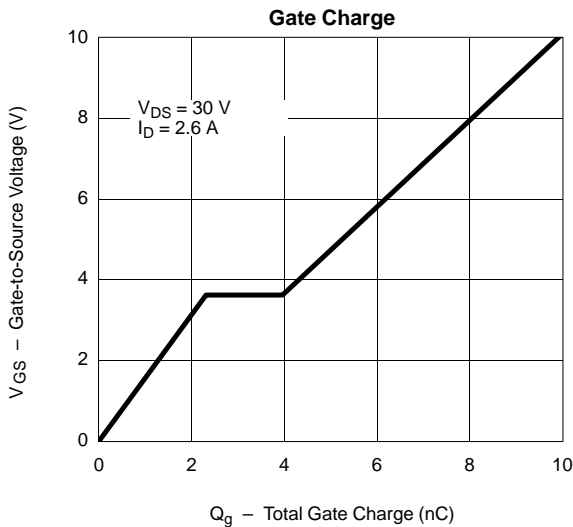
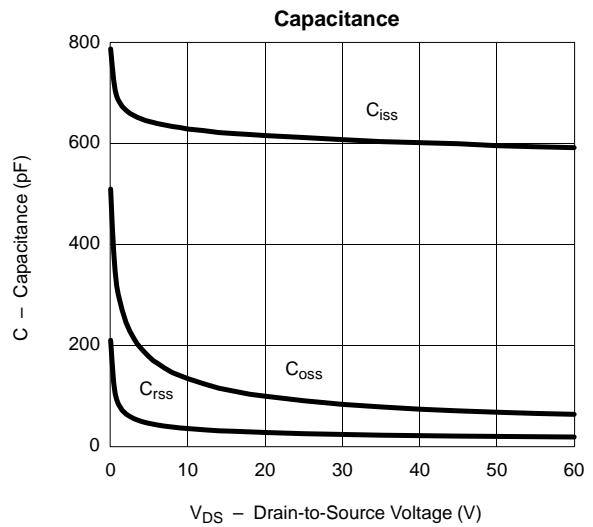
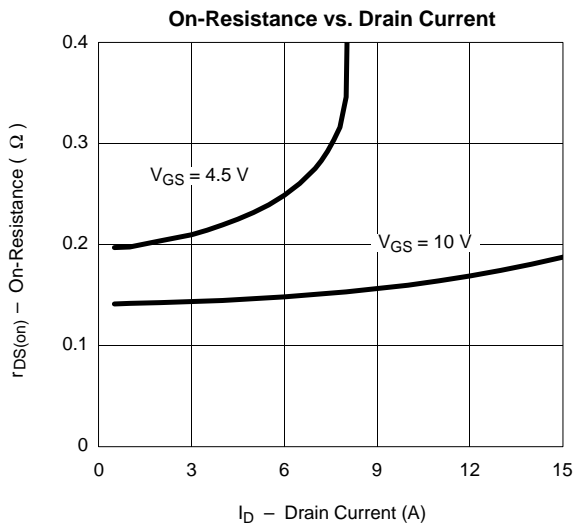
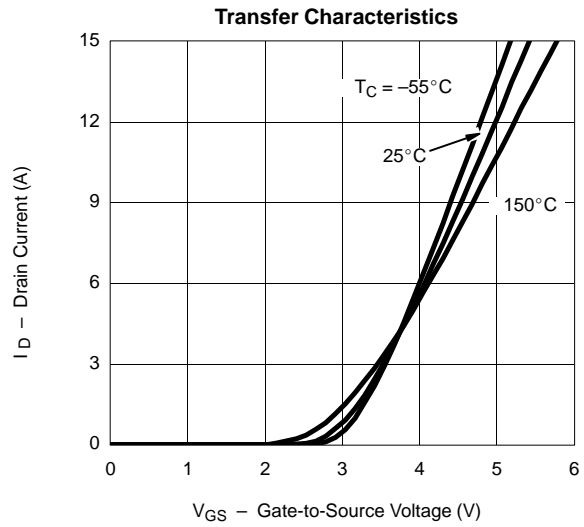
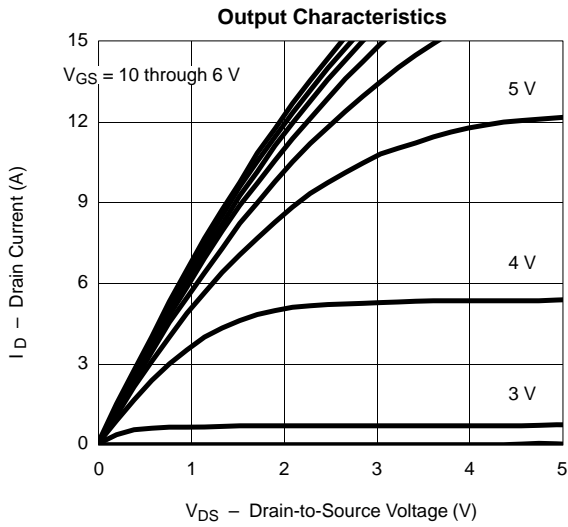
SPECIFICATIONS (T_J = 25 °C UNLESS OTHERWISE NOTED)						
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250 μA	-1			V
Gate-Body Leakage	I _{GSS}	V _{DS} = 0 V, V _{GS} = ±20 V			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -60 V, V _{GS} = 0 V			-1	μA
		V _{DS} = -60 V, V _{GS} = 0 V, T _J = 55°C			-10	
On-State Drain Current ^a	I _{D(on)}	V _{DS} ≤ -5 V, V _{GS} = -10 V	-15			A
Drain-Source On-State Resistance ^a	r _{DS(on)}	V _{GS} = -10 V, I _D = -2.6 A		0.14	0.17	Ω
		V _{GS} = -4.5 V, I _D = -2.1 A		0.20	0.26	
Forward Transconductance ^a	g _{fs}	V _{DS} = -15 V, I _D = -2.6 A		5.0		S
Diode Forward Voltage ^a	V _{SD}	I _S = -2.0 A, V _{GS} = 0 V			-1.2	V
Dynamic^b						
Total Gate Charge	Q _g	V _{DS} = -30 V, V _{GS} = -10 V, I _D = -2.6 A		10	20	nC
Gate-Source Charge	Q _{gs}			2.5		
Gate-Drain Charge	Q _{gd}			1.8		
Turn-On Delay Time	t _{d(on)}	V _{DD} = -30 V, R _L = 30 Ω I _D ≅ -1 A, V _{GEN} = -10 V, R _G = 6 Ω		8	20	ns
Rise Time	t _r			10	20	
Turn-Off Delay Time	t _{d(off)}			23	40	
Fall Time	t _f			12	20	
Source-Drain Reverse Recovery Time	t _{rr}	I _F = -2.0 A, di/dt = 100 A/μs		50	90	

Notes

- a. Pulse test; pulse width ≤ 300 μs, duty cycle ≤ 2%.
- b. Guaranteed by design, not subject to production testing.



TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)





TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

