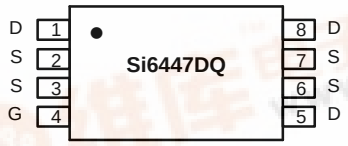
查询SI6447DQ供应商 捷多邦，专业PCB打样工厂，24小时加急出货

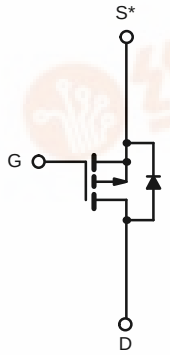
P-Channel 20-V (D-S) MOSFET

PRODUCT SUMMARY		
V_{DS} (V)	$r_{DS(on)}$ (Ω)	I_D (A)
–20	0.09 @ V_{GS} = –10 V	±3.2
	0.16 @ V_{GS} = –4.5 V	±2.4

TSSOP-8



Top View



* Source Pins 2, 3, 6 and 7 must be tied common.

P-Channel MOSFET

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C UNLESS OTHERWISE NOTED)				
Parameter		Symbol	Limit	Unit
Drain-Source Voltage		V_{DS}	–20	V
Gate-Source Voltage		V_{GS}	±20	
Continuous Drain Current (T_J = 150°C)[a]	T_A = 25°C	I_D	±3.2	A
	T_A = 70°C		±2.5	
Pulsed Drain Current		I_{DM}	±20	
Continuous Source Current (Diode Conduction)[a]		I_S	–1.7	
Maximum Power Dissipation[a]	T_A = 25°C	P_D	1.5	W
	T_A = 70°C		1.0	
Operating Junction and Storage Temperature Range		T_J, T_{stg}	–55 to 150	°C

THERMAL RESISTANCE RATINGS			
Parameter	Symbol	Limit	Unit
Maximum Junction-to-Ambient[a]	R_{thJA}	83	°C/W

Notes
a. Surface Mounted on FR4 Board, t ≤ 10 sec.

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

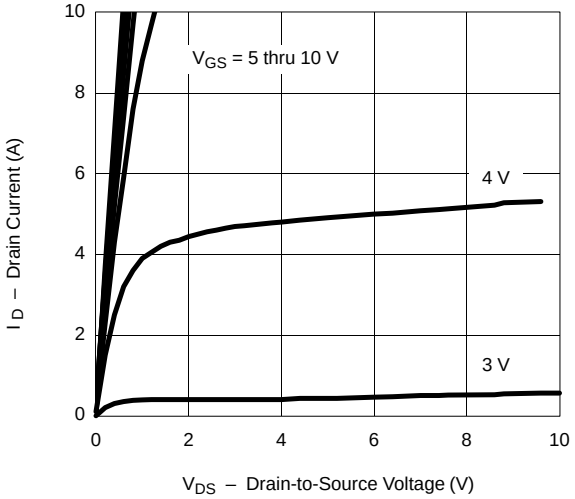
找PDF 维库一下 pdf.dzsc.com

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	–1.0			V
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0$ V, $V_{GS} = \pm 20$ V			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = –20$ V, $V_{GS} = 0$ V			–1	µA
		$V_{DS} = –10$ V, $V_{GS} = 0$ V, $T_J = 70°C$			–5	
On-State Drain Current[a]	$I_{D(on)}$	$V_{DS} = –5$ V, $V_{GS} = –10$ V	–14			A
		$V_{DS} = –5$ V, $V_{GS} = –4.5$ V	–2.5			
Drain-Source On-State Resistance[a]	$r_{DS(on)}$	$V_{GS} = –10$ V, $I_D = 3.2$ A		0.060	0.09	Ω
		$V_{GS} = –4.5$ V, $I_D = 2.0$ A		0.100	0.16	
Forward Transconductance[a]	g_{fs}	$V_{DS} = –15$ V, $I_D = –3.2$ A		4.0		S
Diode Forward Voltage[a]	V_{SD}	$I_S = –1.7$ A, $V_{GS} = 0$ V		–0.9	–1.2	V
Dynamic[b]						
Total Gate Charge	Q_g	$V_{DS} = –10$ V, $V_{GS} = –10$ V, $I_D = –3.2$ A		15	25	nC
Gate-Source Charge	Q_{gs}			3		
Gate-Drain Charge	Q_{gd}			3.5		
Turn-On Delay Time	$t_{d(on)}$	$V_{DD} = –10$ V, $R_L = 10$ Ω $I_D \cong –1$ A, $V_{GEN} = –10$ V, $R_G = 6$ Ω		13	40	ns
Rise Time	t_r			13	25	
Turn-Off Delay Time	$t_{d(off)}$			30	50	
Fall Time	t_f			13	20	
Source-Drain Reverse Recovery Time	t_{rr}	$I_F = –1.7$ A, di/dt = 100 A/µs		50	100	

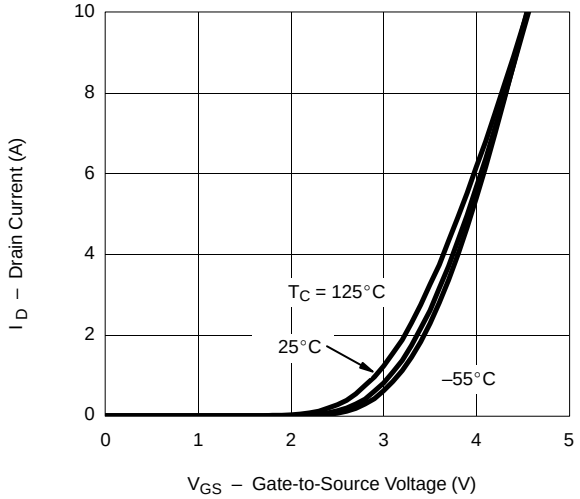
Notes
a. Pulse test; pulse width ≤ 300 µs, duty cycle ≤ 2%.
b. Guaranteed by design, not subject to production testing.

TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

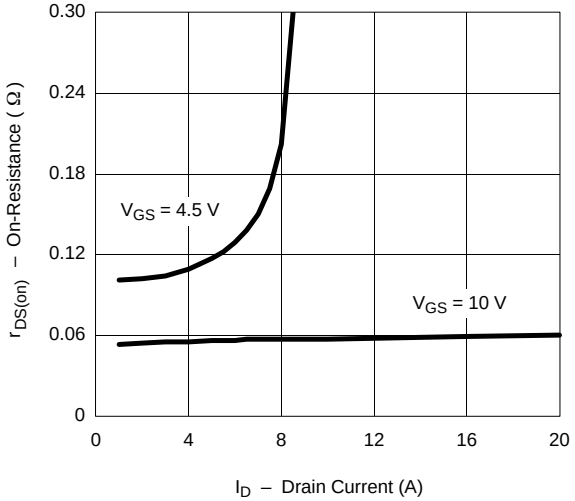
Output Characteristics



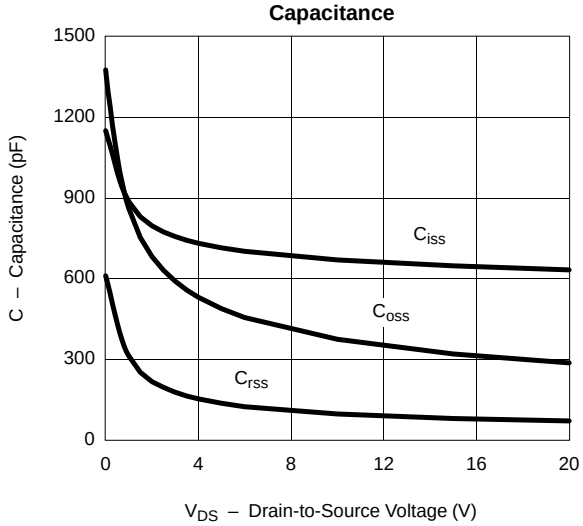
Transfer Characteristics



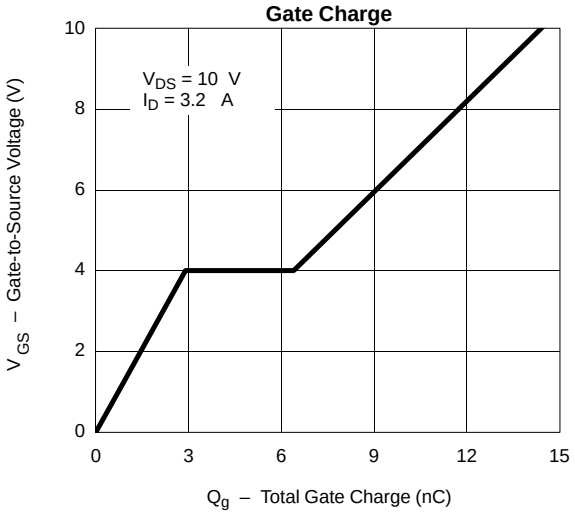
On-Resistance vs. Drain Current



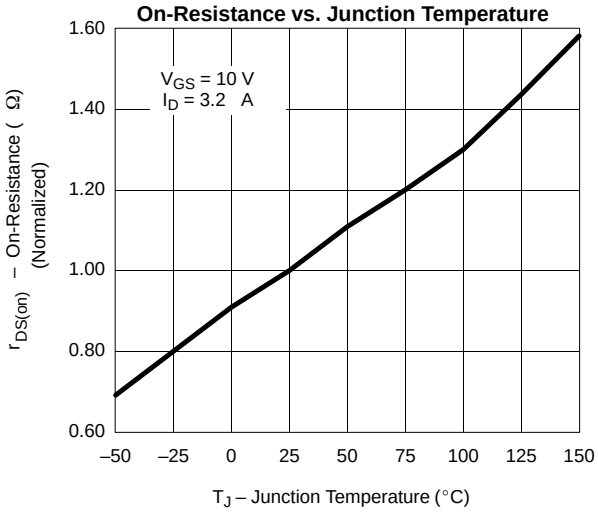
Capacitance



Gate Charge

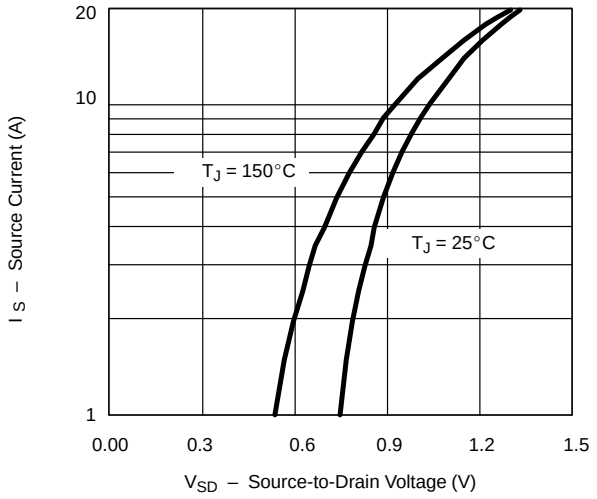


On-Resistance vs. Junction Temperature

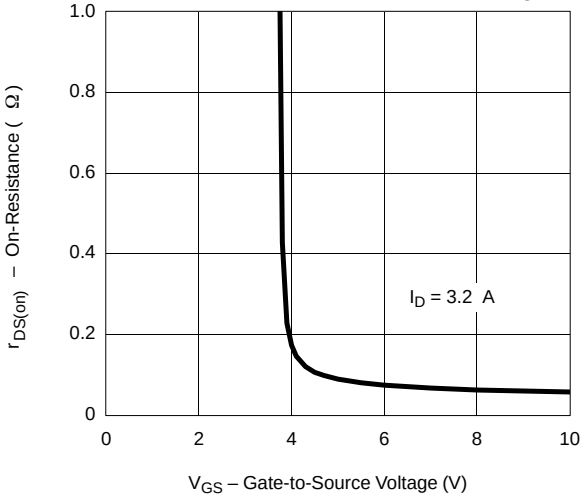


TYPICAL CHARACTERISTICS (25°C UNLESS NOTED)

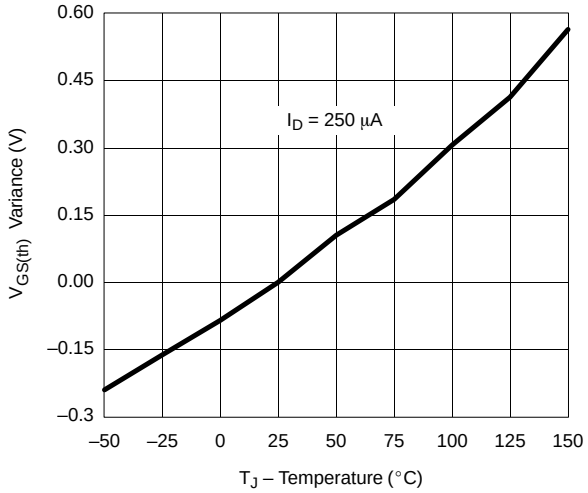
Source-Drain Diode Forward Voltage



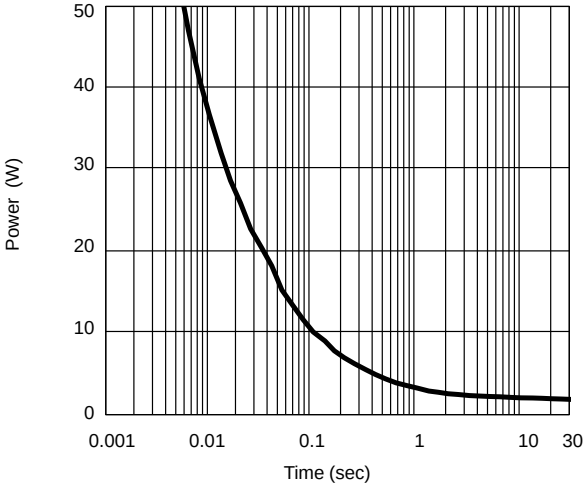
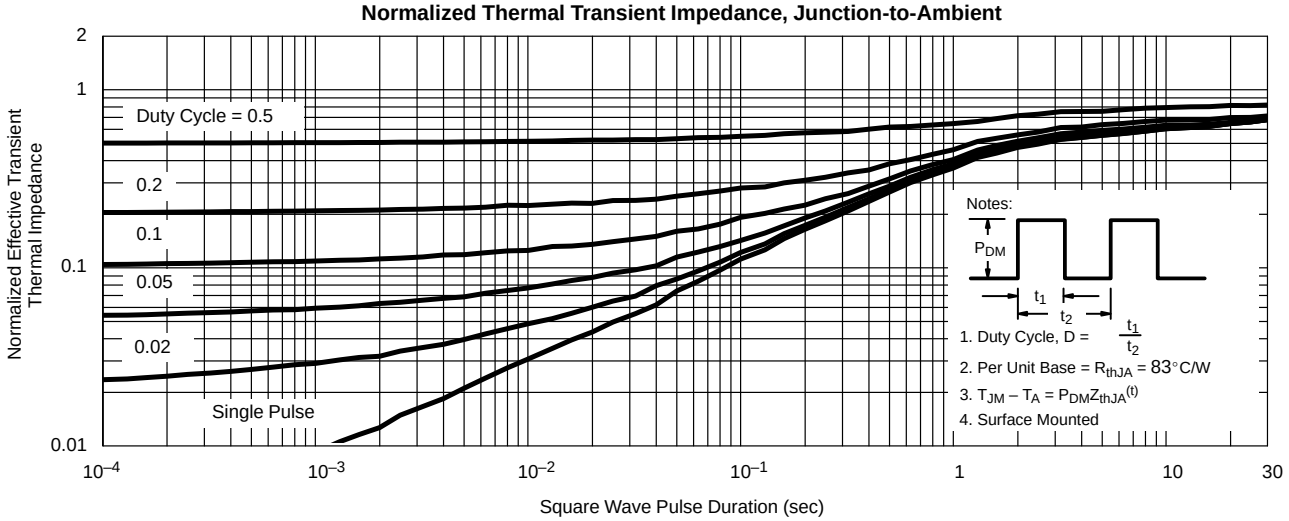
On-Resistance vs. Gate-to-Source Voltage



Threshold Voltage



Single Pulse Power



Normalized Thermal Transient Impedance, Junction-to-Ambient