

N-Channel Enhancement Mode MOSFET

● DESCRIPTION

The VIC1266DQ uses advanced trench technology and design to provide excellent RDS(ON) with low gate charge.

This device is suitable for use as a load switch or in PWM applications.

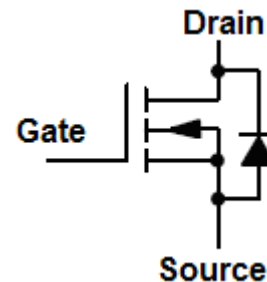
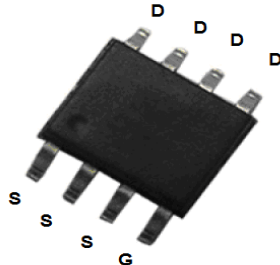
● FEATURE

- ◆ VDS=60V;VGS=±20V;ID=15A
- ◆ RDS(ON)=12mΩ (TYP.) VGS=10V
- RDS(ON)=15mΩ (TYP.) VGS=4.5V

● APPLICATIONS

- ◆ High Frequency Point-of-load synchronous Buck Converter
- ◆ Uninterruptible power supply
- ◆ Networking DC-DC Power System
- ◆ Load/power switch

● PIN CONFIGURATION



● ABSOLUTE MAXIMUM RATINGS(TA=25°C Unless otherwise noted)

Symbol	Parameter	Rating		Unit
VDS	Drain-Source Voltage	60		V
VGS	Gate-Source Voltage	±20		
ID	Continuous Drain Current	VGS=10V	15	A
IDP	Drain Current (Pulse)	30		A
TJ	Maximum Junction Temperature	150		°C
TSTG	Storage Temperature Range	-55 to 150		
PD	Maximum Power Dissipation (Ta=25°C)	5.2		W



VIC1266DQ

● ELECTRICAL CHARACTERISTICS(TA=25°C Unless otherwise noted)

Symbol	Parameter	Test Conditions	VIC1266DQ			Unit
			Min.	Typ.	Max.	
Static Characteristics						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V, I _D =-250μA	60	--	--	V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =60V, V _{GS} =0V	--	--	1	μA
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _D =250μA	2	3	4	V
I _{GSS}	Gate-Source Leakage Current	V _{GS} =±20V, V _{DS} =0V	--	--	±100	nA
R _{DS(ON) a}	Drain-Source On-state Resistance	V _{GS} =10V, I _D =15A	--	12	13.0	mΩ
		V _{GS} =4.5V, I _D =10A	--	15	16.0	
g _{fs}	Forward Transconductance a	V _{ds} =5V, I _d =15A	30	--	--	S
Dynamic b						
Q _g	Total Gate Charge(10V)	V _{GS} =10V, V _{DS} =30V, I _d =6A	--	30	--	nC
Q _{gs}	Gate-Source Charge		--	7.8	--	
Q _{gd}	Gate-Drain Charge		--	9.6	--	
C _{iss}	Input Capacitance	V _{GS} =0V, V _{DS} =25V, f=1MHz	--	2788	--	pF
C _{oss}	Output Capacitance		--	185	--	
C _{rss}	Reverse Transfer Capacitance		--	96	--	
SWITCHING CHARACTERISTICS						
t _{d(ON)}	Turn-on Delay Time	V _{DD} =30V, V _{GS} =10V, I _{DS} =2A, R _G =3.3Ω	--	12	--	ns
t _{d(OFF)}	Turn-off Delay Time		--	38	--	
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
I _s	Drain-Source Diode Forward Current	V _g =V _d =0V, Force Current	--	--	15	A
V _{sd a}	Diode Forward Voltage	I _s = 1A, V _{GS} = 0V	--	--	1.2	V

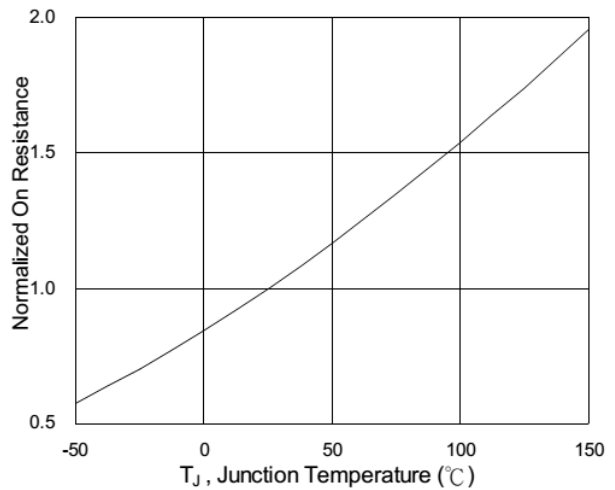
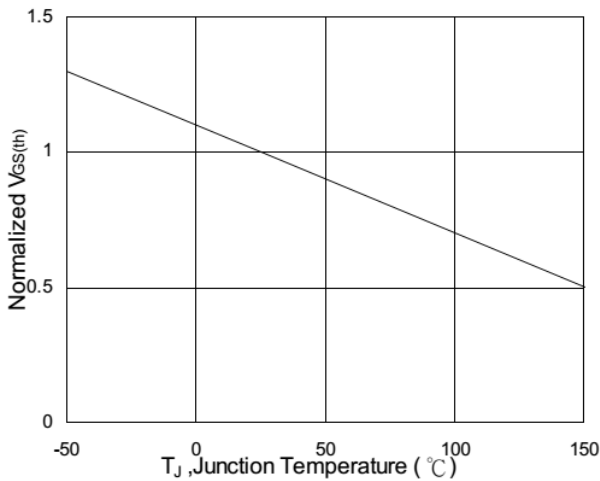
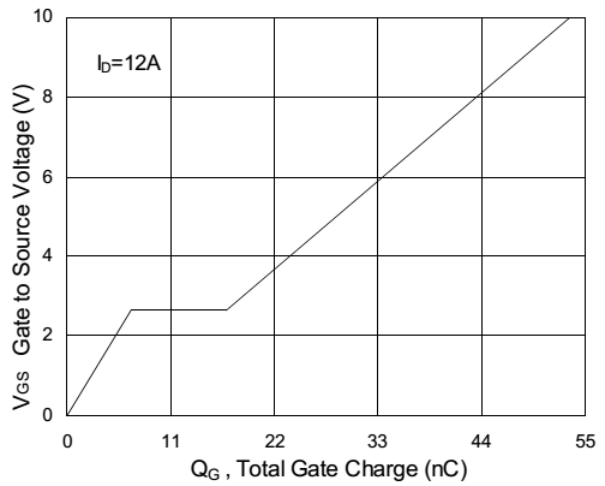
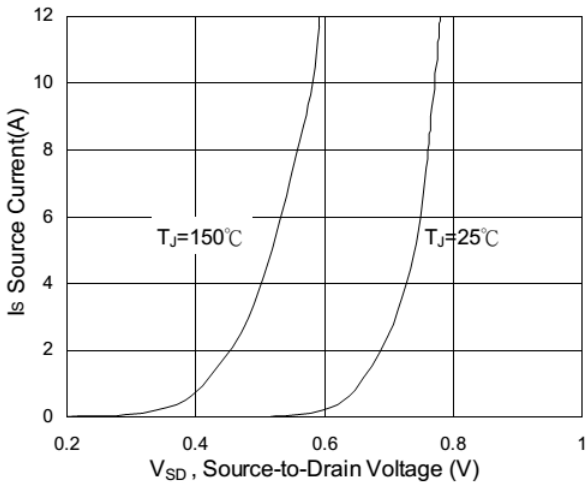
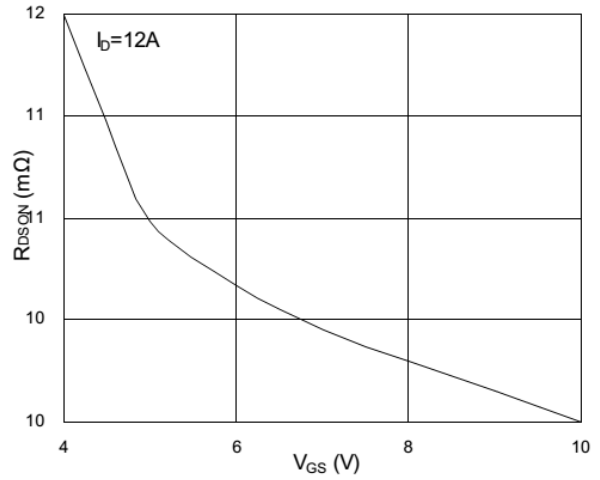
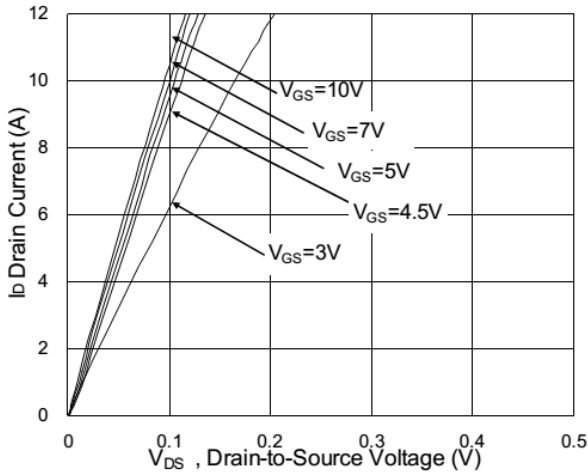
Notes:

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

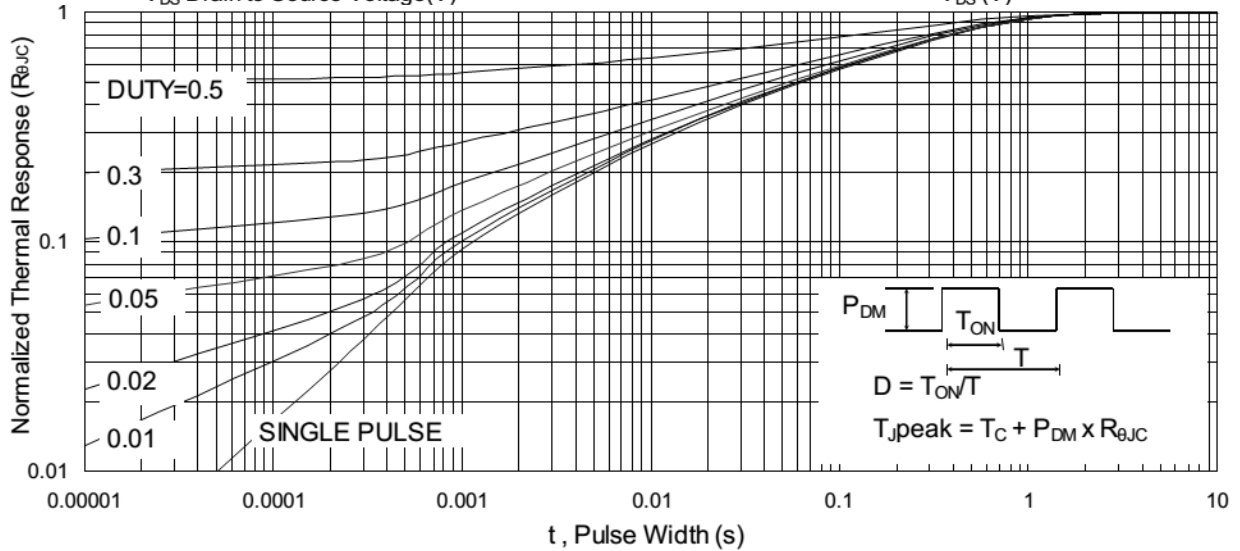
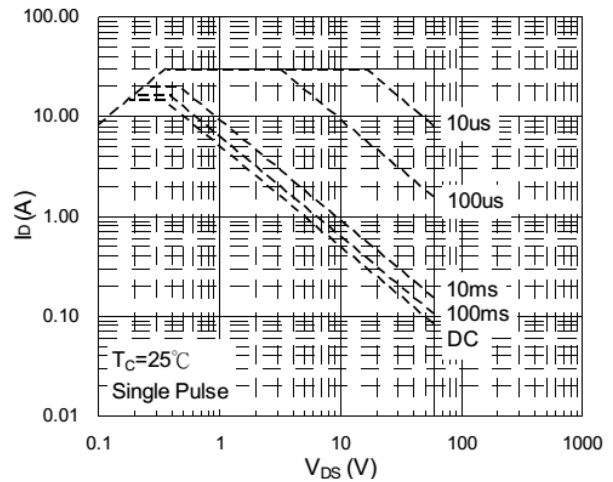
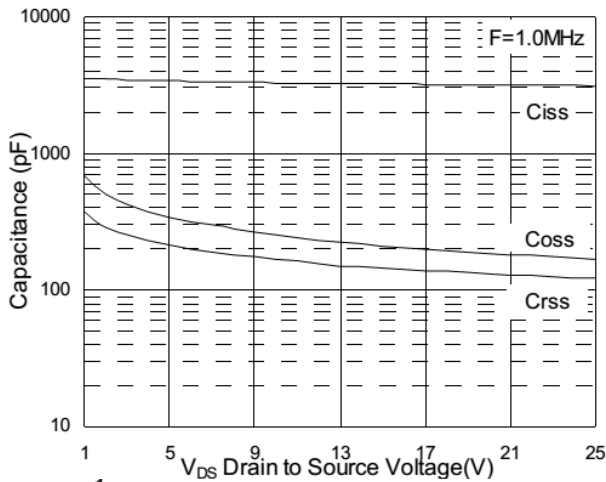
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● **TYPICAL CHARACTERISTICS (TA=25°C Unless otherwise noted)**



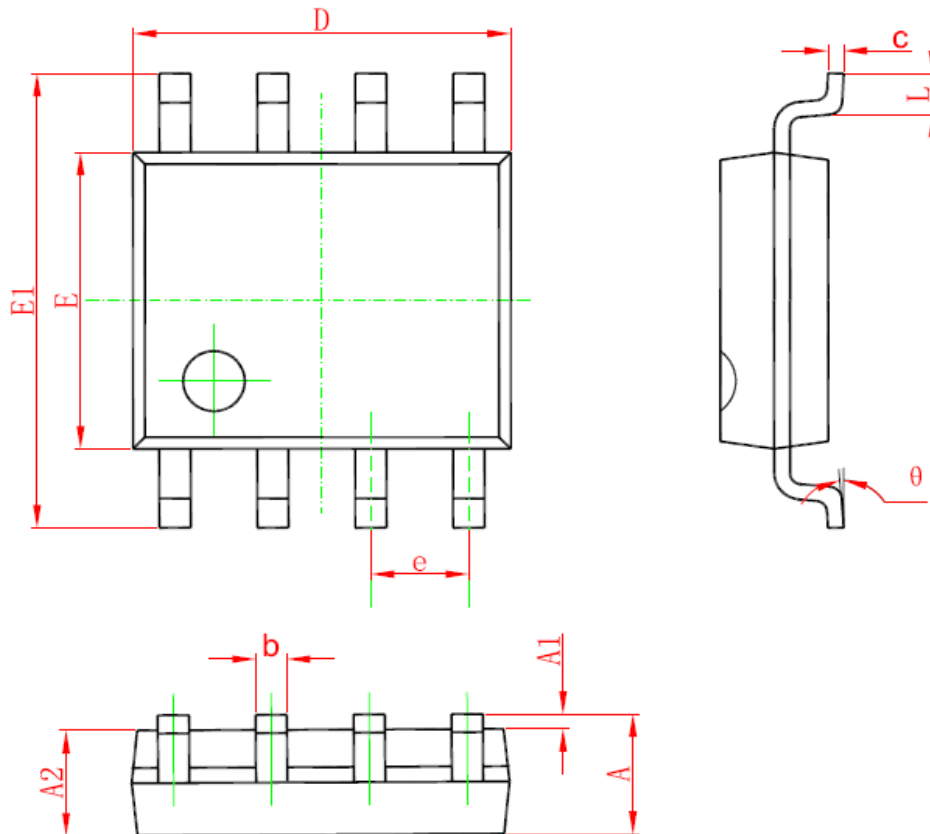
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● ORDERING INFORMATION

Part Number	Package code	Shipping
VIC1266DQ	DQ: SOP8	3000/Tape & Reel

● PACKAGE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
e	1.270 (BSC)		0.050 (BSC)	
L	0.400	1.270	0.016	0.050
theta	0°	8°	0°	8°

单击下面可查看定价，库存，交付和生命周期等信息

[>>VIC\(微科\)](#)