

N-Channel Enhancement Mode MOSFET

● DESCRIPTION

The VIC1262 is the n-channel logic enhancement mode power field effect transistor is produced using high cell density, which provide excellent RDSON and gate charge for most of the synchronous buck converter applications .

These devices are particularly suited for low voltage application, and low in-line power loss are needed in a very small outline surface mount package.

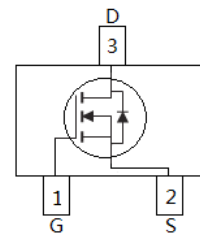
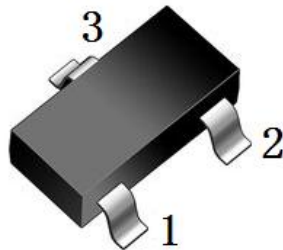
● FEATURE

- ◆ $V_{DS}=60V; V_{GS}=\pm 20V; I_D=6A$
- ◆ $R_{DS(ON)}=25m\Omega$ (TYP.)@ $V_{GS}=10V$
- ◆ $R_{DS(ON)}=31m\Omega$ (TYP.)@ $V_{GS}=4.5V$

● APPLICATIONS

- ◆ Power Management in Notebook
- ◆ Potable Equipment
- ◆ Battery Powered System
- ◆ DC/DC Converter
- ◆ Load Switch、 DSC LCD Display inverter

● PIN CONFIGURATION



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

Symbol	Parameter	Rating		Unit
V _{DS}	Drain-Source Voltage	60		V
V _{GS}	Gate-Source Voltage	±20		
I _D	Continuous Drain Current (25°C)	V _{GS} =10V	6	A
	Continuous Drain Current (100°C)	V _{GS} =10V	4.8	A
IDP	Power Dissipation	21		A
T _J	Maximum Junction Temperature	150		°C
T _{STG}	Storage Temperature Range	-55 to 150		
PD	Maximum Power Dissipation (Ta=25°C)	2.5		W



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

Symbol	Parameter	Test Conditions	VIC1262DJ			Unit
			Min.	Typ.	Max.	
Static Characteristics						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V, I _{DS} =10μA	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 _{DS} =250μA	1.0	--	2.5	V
I _{GSS}	Gate-Body Leakage Current	V _{GS} =±20V, V _{DS} =0V	--	--	±10	μA
g _{fs}	Forward Transconductance	V _{DS} =5V, I _D =5A	--	20	--	s
R _{DS(ON)} a	Drain-Source On-state Resistance	V _{GS} =10V, I _D =4A	--	25	40	mΩ
		V _{GS} =4.5V, I _D =2A	--	31	48	
Dynamic b						
Q _g	Total Gate Charge	V _{GS} =4.5V, V _{DS} =48V, I _{DS} =6A	--	12.5	--	nC
Q _{gs}	Gate-Source Charge		--	3.25	--	
Q _{gd}	Gate-Drain Charge		--	6.45	--	
C _{iss}	Input Capacitance	V _{DS} =15V, V _{GS} =0V, f=1MHz	--	1390	--	pF
C _{oss}	Output Capacitance		--	92	--	
C _{rss}	Reverse Transfer Capacitance		--	75	--	
SWITCHING CHARACTERISTICS						
t _{d(ON)}	Turn-on Delay Time	V _{DD} =48V, R _L =10Ω, I _{DS} =-1.0A, V _{GEN} =4.5V, R _G =6Ω	--	8	--	ns
t _{d(OFF)}	Turn-off Delay Time		--	24.5	--	
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
V _{sD} a	Diode Forward Voltage	I _s = 300mA, V _{GS} =0V	--	0.8	1.2	V

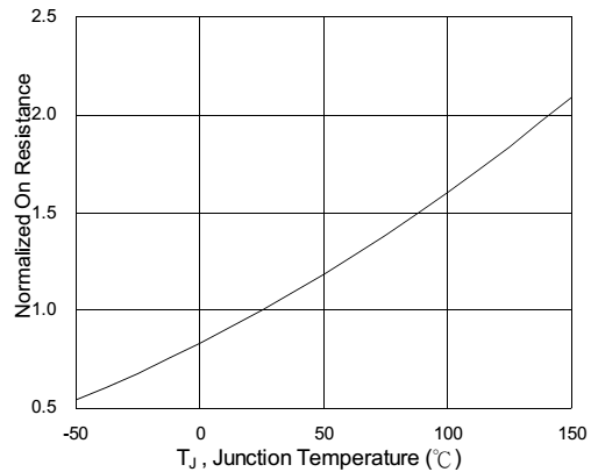
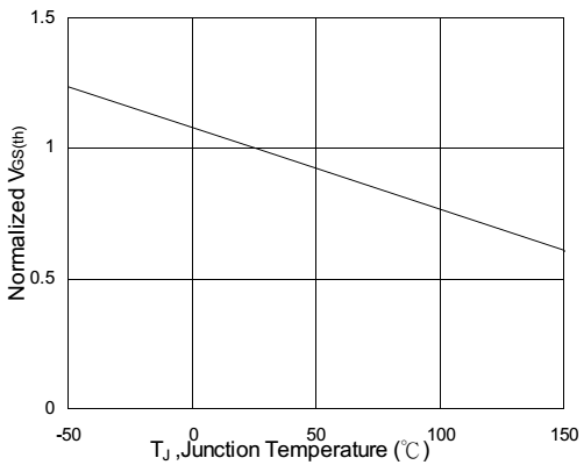
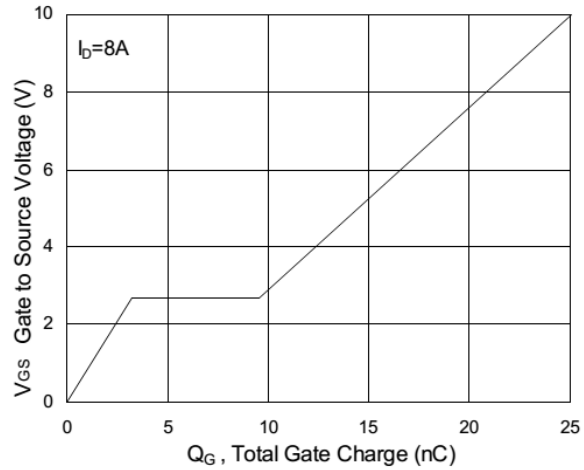
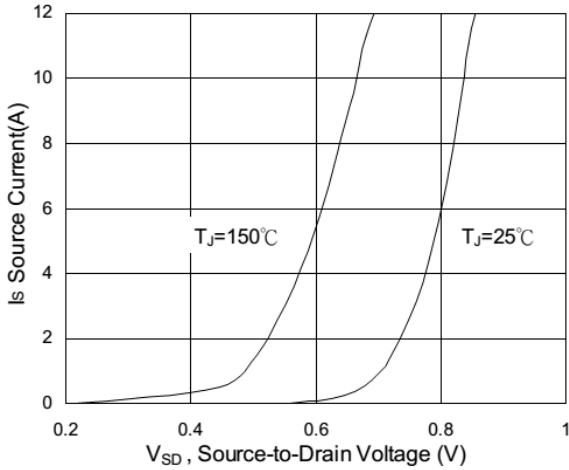
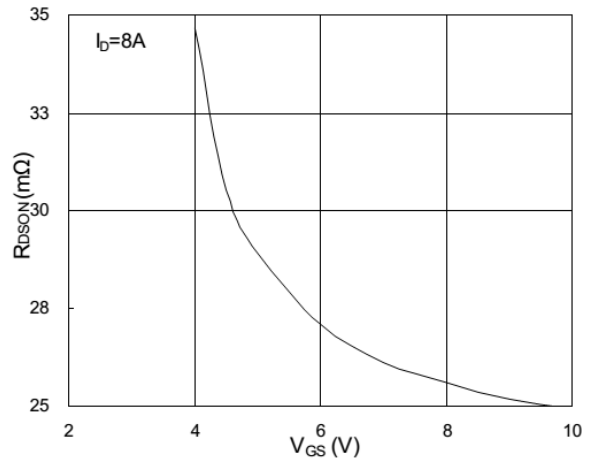
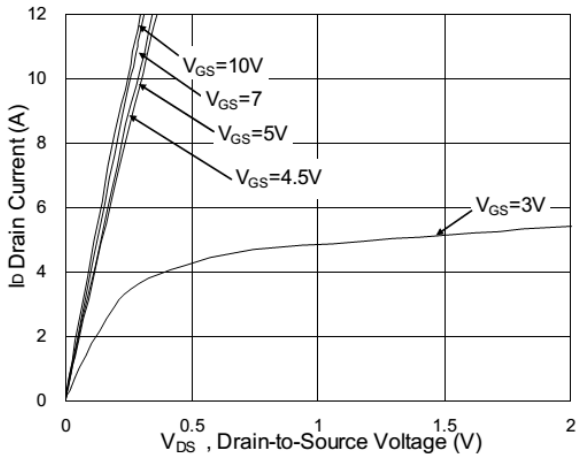
Notes:

- a. Pulse test; pulse width ≤ 10μs, duty cycle ≤ 1%
- b. When mounted on a 1*0.75*0.062 inch glass epoxy board%

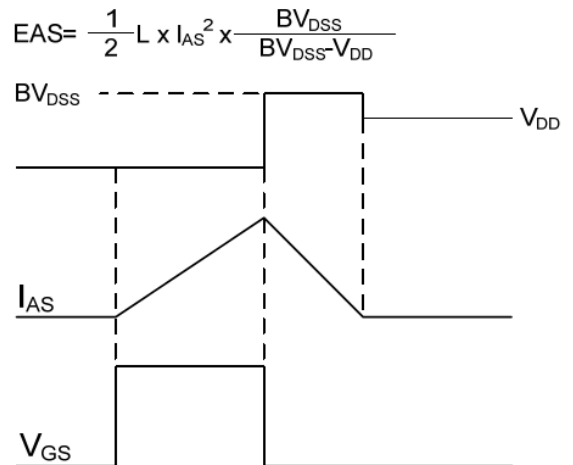
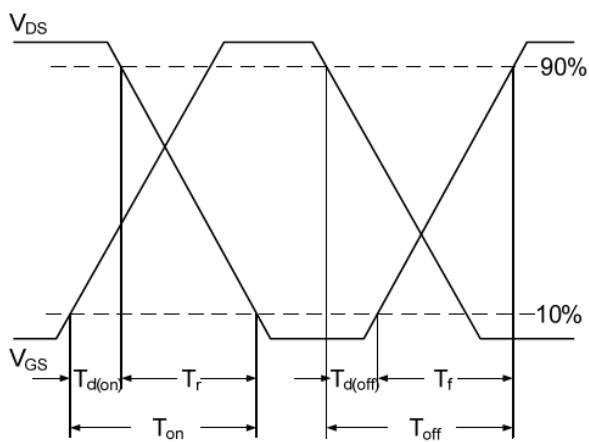
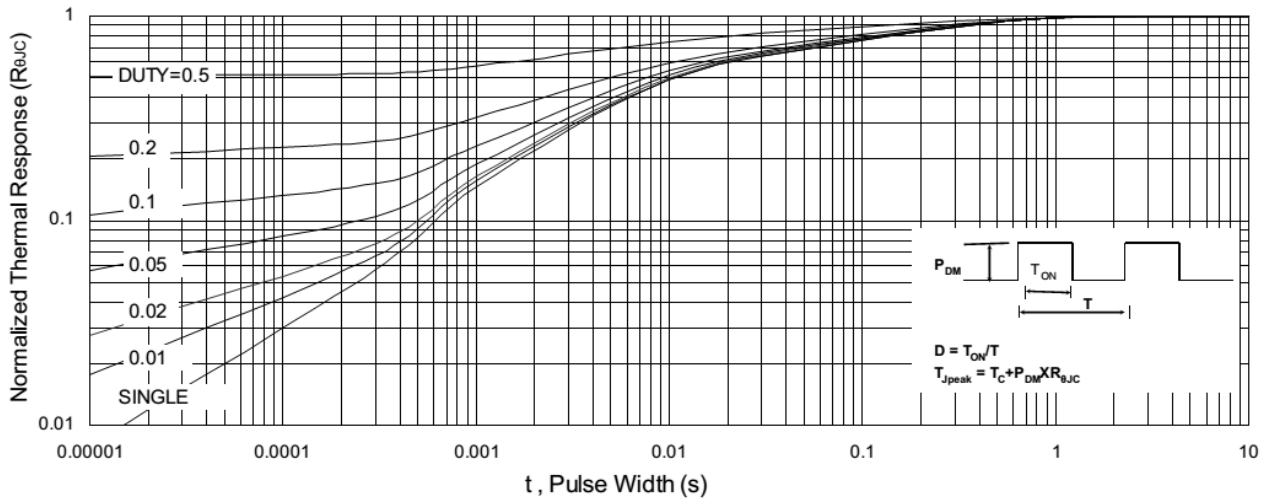
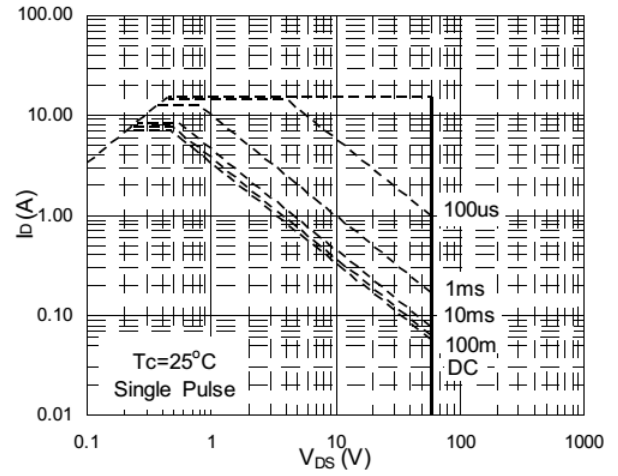
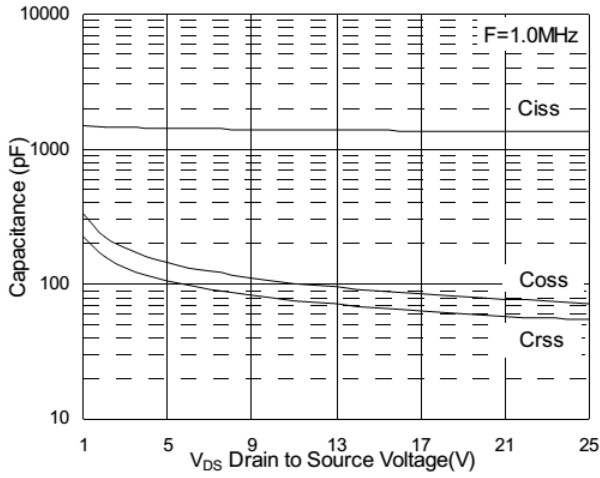
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● **TYPICAL CHARACTERISTICS (TA=25°C Unless otherwise noted)**



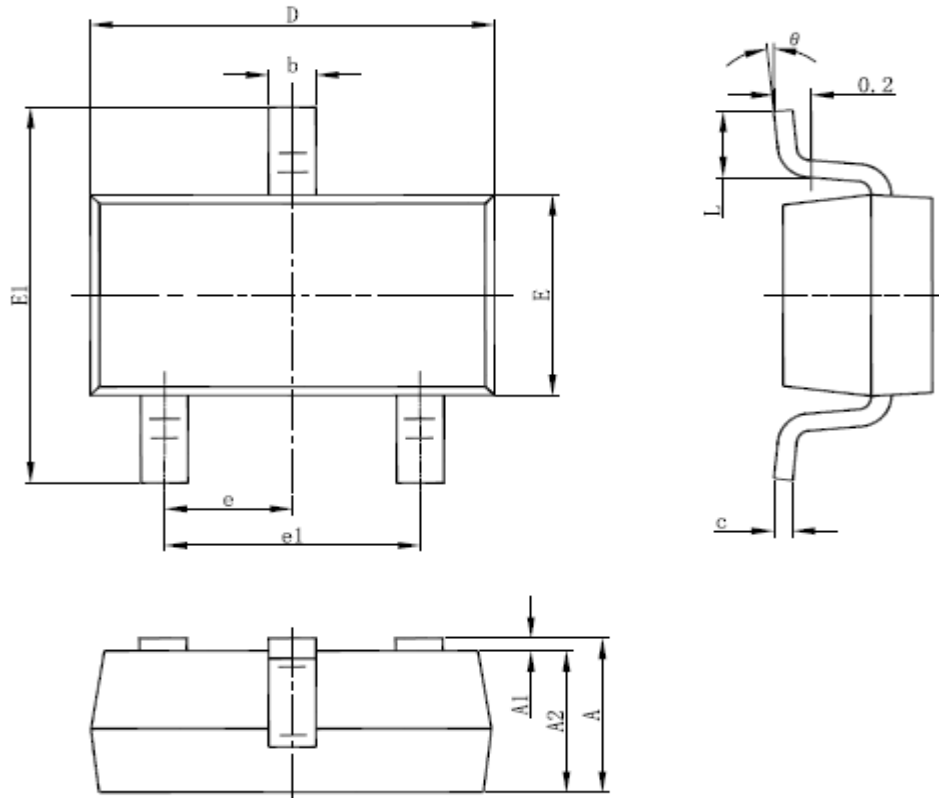
● TYPICAL CHARACTERISTICS (TA=25°C Unless otherwise noted)



● ORDERING INFORMATION

Part Number	Package code	Shipping
VIC1262DJ	DJ: SOT23-3L	3000/Tape & Reel

● PACKAGE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
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\(微科\)](#)