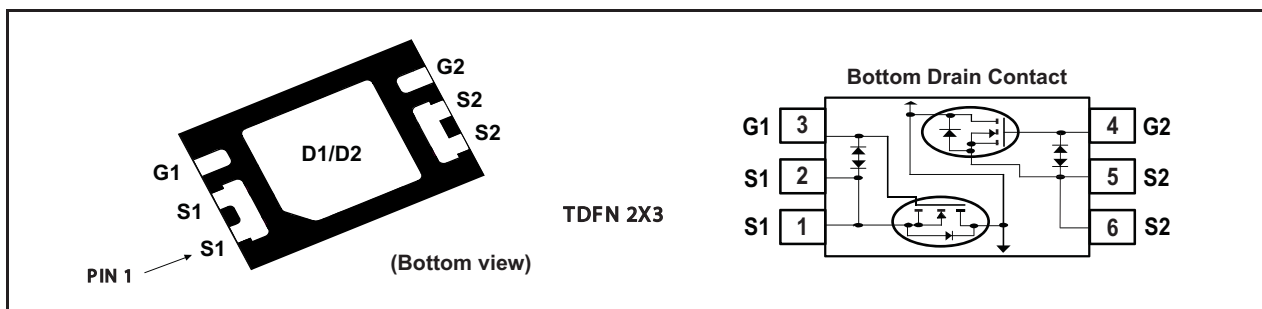


**Dual N-Channel Enhancement Mode Field Effect Transistor****PRODUCT SUMMARY**

V _{DSS}	I _D	R _{DS(ON)} (mΩ) Max
24V	8.0A	14.0 @ V _{GS} =4.5V
		14.3 @ V _{GS} =4.0V
		14.5 @ V _{GS} =3.7V
		16.5 @ V _{GS} =3.1V
		20.0 @ V _{GS} =2.5V

FEATURES

- Super high dense cell design for low R_{DS(ON)}.
- Rugged and reliable.
- Surface Mount Package.
- ESD Protected.

**ABSOLUTE MAXIMUM RATINGS** (T_A=25°C unless otherwise noted)

Symbol	Parameter	Limit	Units
V _{DS}	Drain-Source Voltage	24	V
V _{GS}	Gate-Source Voltage	±12	V
I _D	Drain Current-Continuous ^a	T _A =25°C	8.0
		T _A =70°C	6.4
I _{DM}	-Pulsed ^b	30	A
P _D	Maximum Power Dissipation ^a	T _A =25°C	1.56
		T _A =70°C	1.00
T _J , T _{STG}	Operating Junction and Storage Temperature Range	-55 to 150	°C

THERMAL CHARACTERISTICS

R _{θJA}	Thermal Resistance, Junction-to-Ambient ^a	80	°C/W
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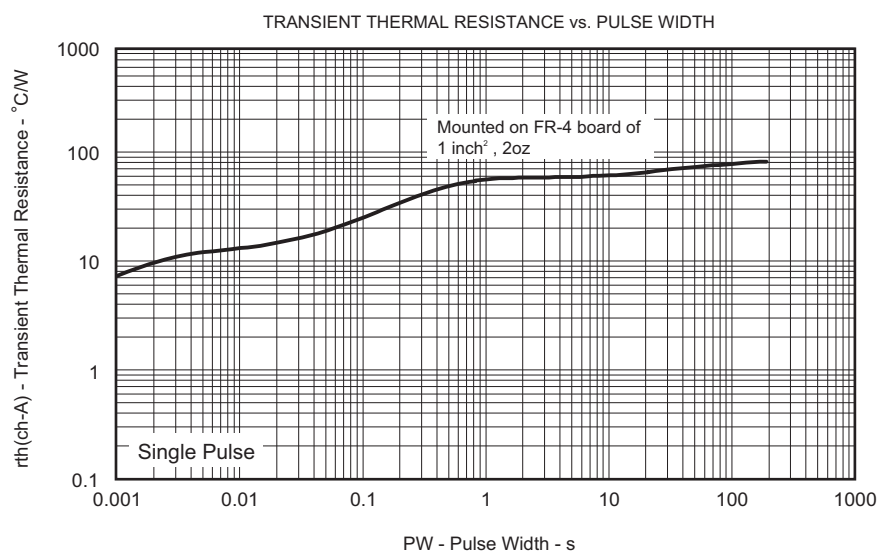
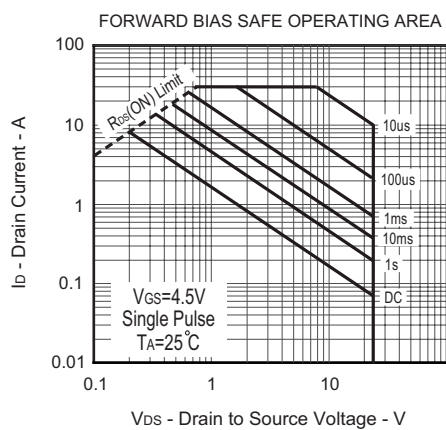
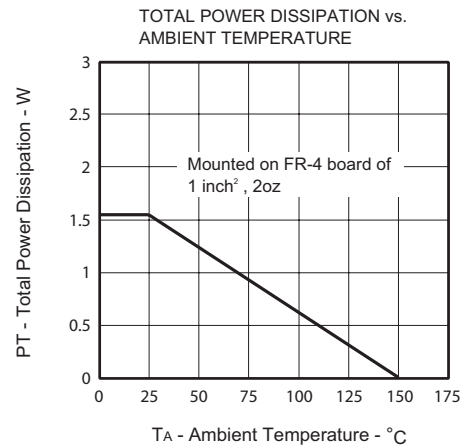
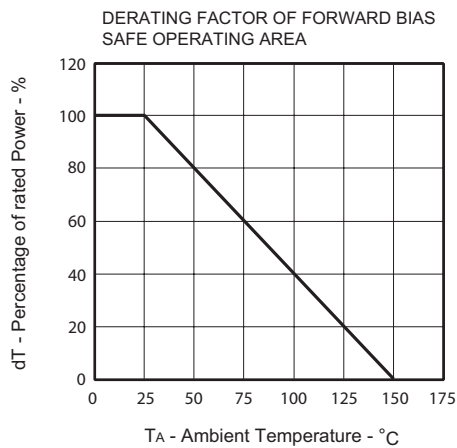
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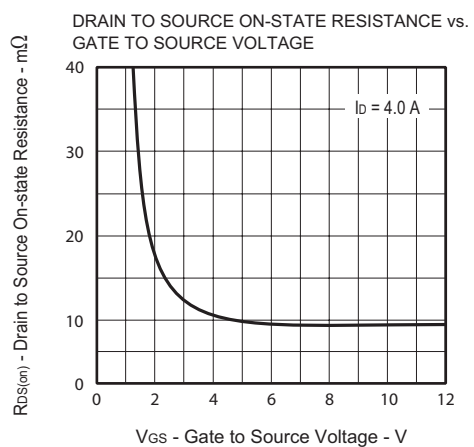
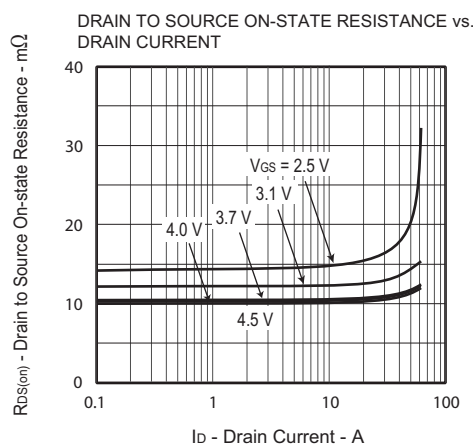
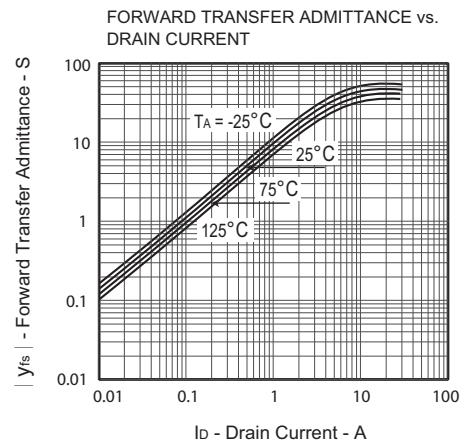
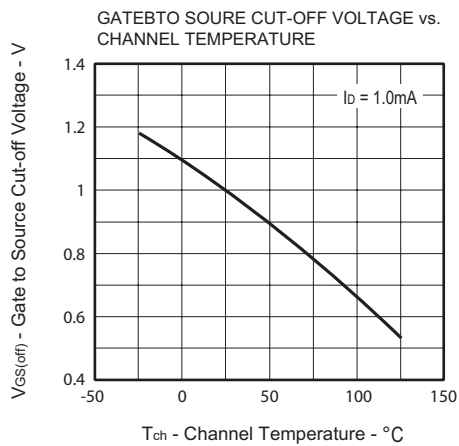
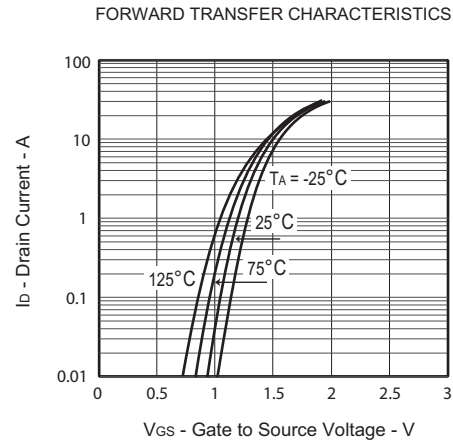
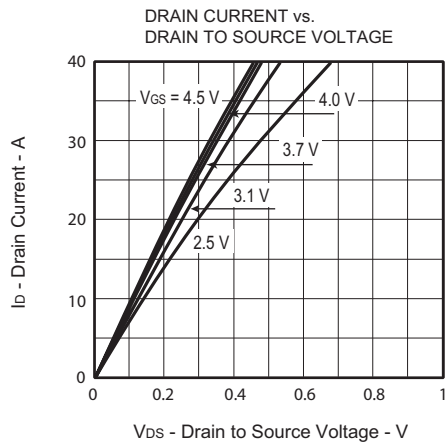
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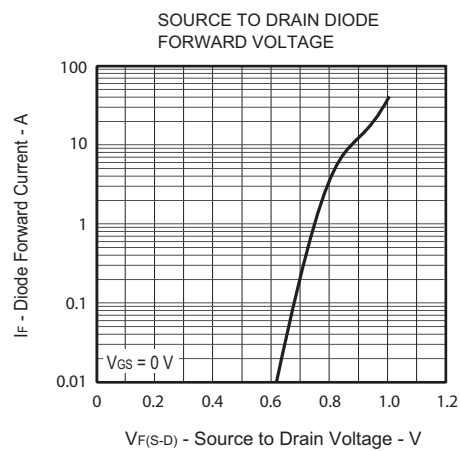
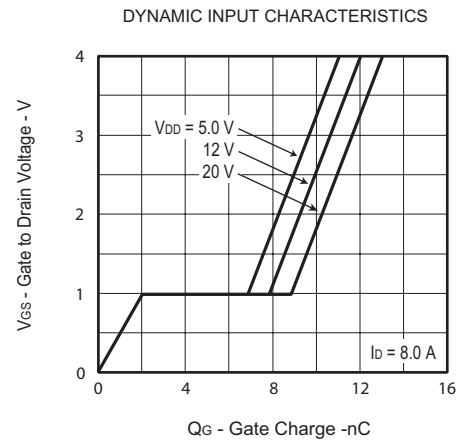
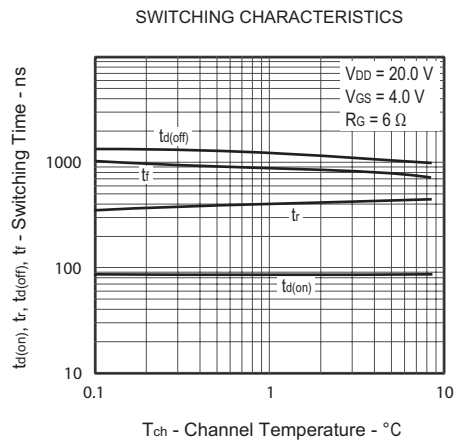
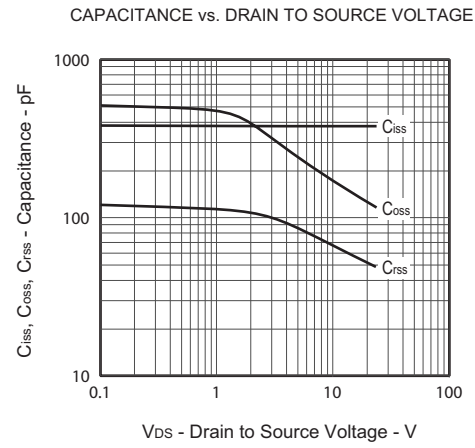
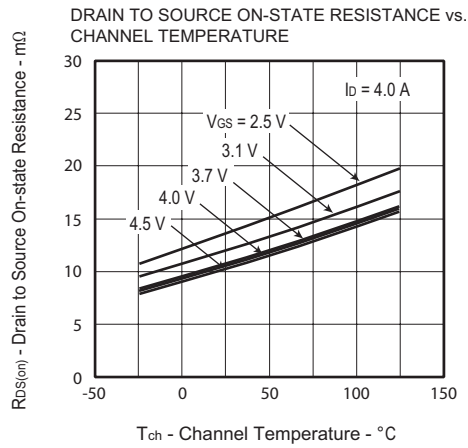
ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
OFF CHARACTERISTICS						
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V , I _D =250uA	24			V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =20V , V _{GS} =0V			1	uA
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±12V , V _{DS} =0V			±10	uA
ON CHARACTERISTICS						
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _D =1.0mA	0.5	0.8	1.5	V
R _{DS(ON)}	Drain-Source On-State Resistance	V _{GS} =4.5V , I _D =4.0A	9.0	11.0	14.0	m ohm
		V _{GS} =4.0V , I _D =4.0A	9.3	11.3	14.3	m ohm
		V _{GS} =3.7V , I _D =4.0A	9.5	11.5	14.5	m ohm
		V _{GS} =3.1V , I _D =4.0A	10.0	12.5	16.5	m ohm
		V _{GS} =2.5V , I _D =4.0A	12.5	14.5	20.0	m ohm
g _{FS}	Forward Transconductance	V _{DS} =10V , I _D =4.0A		33		S
DYNAMIC CHARACTERISTICS ^c						
C _{iss}	Input Capacitance	V _{DS} =10V,V _{GS} =0V f=1.0MHz		380		pF
C _{OSS}	Output Capacitance			180		pF
C _{RSS}	Reverse Transfer Capacitance			67		pF
SWITCHING CHARACTERISTICS ^c						
t _{D(ON)}	Turn-On Delay Time	V _{DD} =20V I _D =4.0A		80		ns
t _r	Rise Time			435		ns
t _{D(OFF)}	Turn-Off Delay Time	V _{GS} =4.0V R _{GEN} =6 ohm		1150		ns
t _f	Fall Time			725		ns
Q _g	Total Gate Charge	V _{DS} =20V,I _D =8.0A, V _{GS} =4.0V		13		nC
Q _{gs}	Gate-Source Charge			2		nC
Q _{gd}	Gate-Drain Charge			6.9		nC
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
V _{SD}	Diode Forward Voltage	V _{GS} =0V,I _S =8.0A		0.86	1.2	V
Notes						
a.Surface Mounted on FR4 Board,t ≤ 10sec.						
b.Pulse Test:Pulse Width ≤ 300us, Duty Cycle ≤ 2%.						
c.Guaranteed by design, not subject to production testing.						

Apr,15,2011

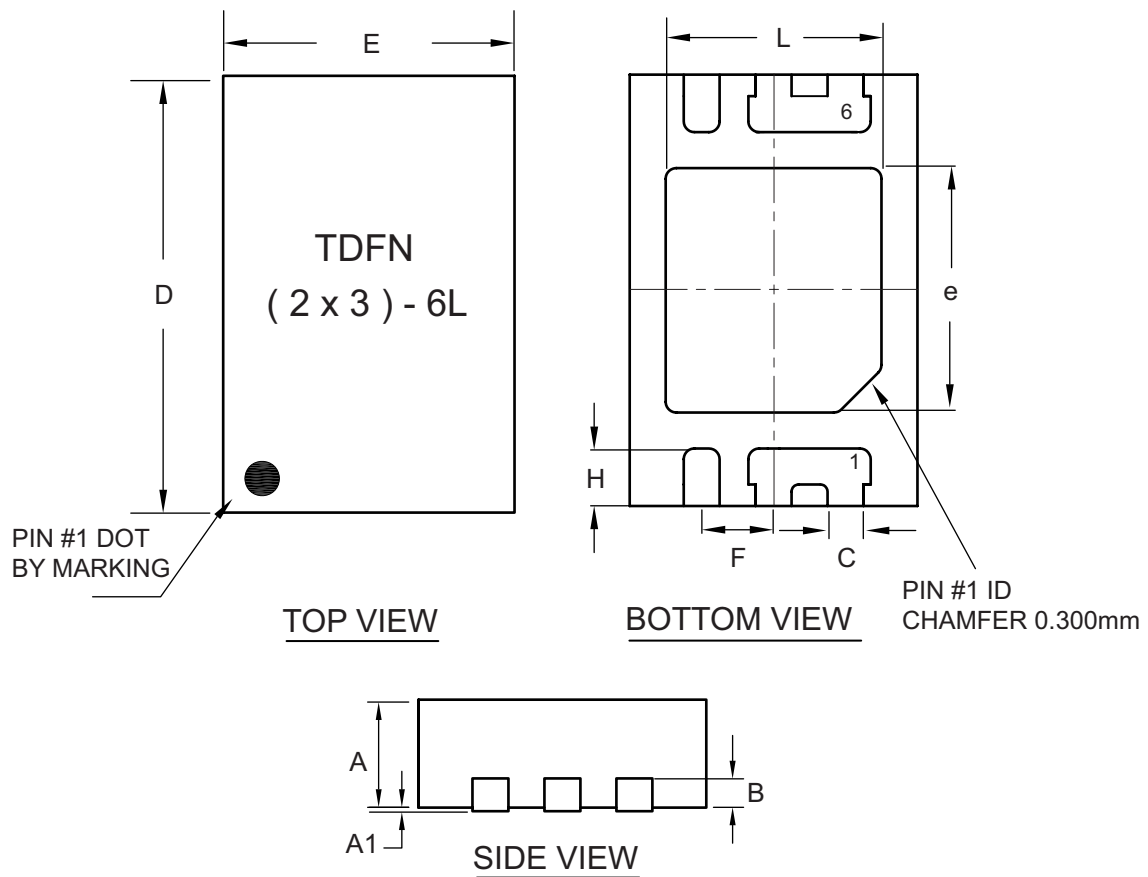






PACKAGE OUTLINE DIMENSIONS

TDFN



SYMBOLS	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.700	0.800	0.028	0.031
A1	0.000	0.050	0.000	0.002
D	2.950	3.050	0.116	0.120
E	1.950	2.050	0.077	0.081
H	0.350	0.450	0.014	0.018
L	1.450	1.550	0.057	0.061
e	1.650	1.750	0.065	0.069
B	0.195	0.211	0.0076	0.008
C	0.200	0.300	0.008	0.012
F	0.500 BSC		0.020 BSC	