



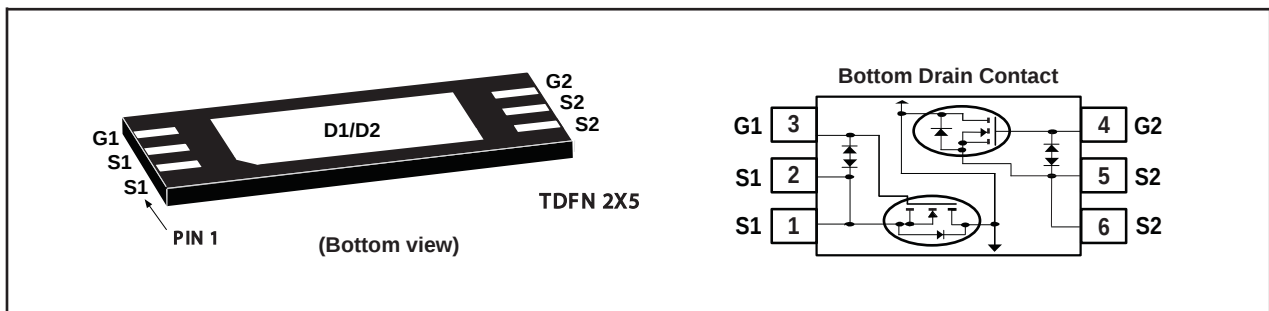
Dual N-Channel Enhancement Mode Field Effect Transistor

PRODUCT SUMMARY

V _{DSS}	I _D	R _{DS(ON)} (mΩ) Max
20V	11A	6.9 @ V _{GS} =4.5V
		7.0 @ V _{GS} =4.0V
		7.2 @ V _{GS} =3.7V
		7.6 @ V _{GS} =3.1V
		8.5 @ 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	20	V
V _{GS}	Gate-Source Voltage	±12	V
I _D	Drain Current-Continuous ^c	T _A =25°C	11
		T _A =70°C	8.8
I _{DM}	-Pulsed ^{a c}	53	A
P _D	Maximum Power Dissipation	T _A =25°C	1.67
		T _A =70°C	1.07
T _J , T _{STG}	Operating Junction and Storage Temperature Range	-55 to 150	°C

THERMAL CHARACTERISTICS

R _{θJA}	Thermal Resistance, Junction-to-Ambient	75	°C/W
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ELECTRICAL CHARACTERISTICS (T_A=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	20			V
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =16V , 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	0.7	1.5	V
R _{DS(ON)}	Drain-Source On-State Resistance	V _{GS} =4.5V , I _D =5.5A	4.0	5.3	6.9	m ohm
		V _{GS} =4.0V , I _D =5.5A	4.1	5.4	7.0	m ohm
		V _{GS} =3.7V , I _D =5.5A	4.2	5.5	7.2	m ohm
		V _{GS} =3.1V , I _D =5.5A	4.3	5.7	7.6	m ohm
		V _{GS} =2.5V , I _D =5.5A	4.7	6.3	8.5	m ohm
g _{FS}	Forward Transconductance	V _{DS} =5V , I _D =5.5A		34		S
SWITCHING CHARACTERISTICS ^b						
t _{D(ON)}	Turn-On Delay Time	V _{DD} =20V I _D =5.5A V _{GS} =10V R _{GEN} =6 ohm		230		ns
t _r	Rise Time			861		ns
t _{D(OFF)}	Turn-Off Delay Time			3536		ns
t _f	Fall Time			2020		ns
Q _g	Total Gate Charge	V _{DS} =20V,I _D =11A,V _{GS} =4.5V		26.5		nC
Q _{gs}	Gate-Source Charge	V _{DS} =20V,I _D =11A, V _{GS} =10V		3.5		nC
Q _{gd}	Gate-Drain Charge			11		nC
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
V _{SD}	Diode Forward Voltage	V _{GS} =0V,I _S =11A		0.81	1.2	V

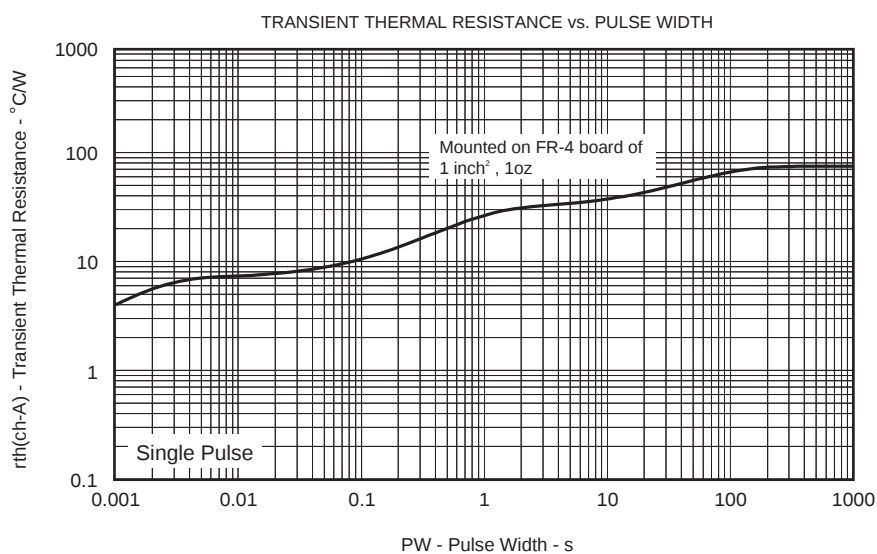
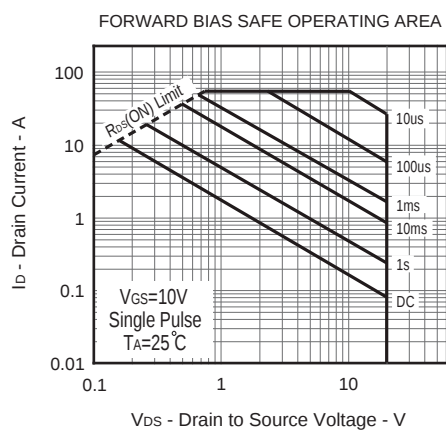
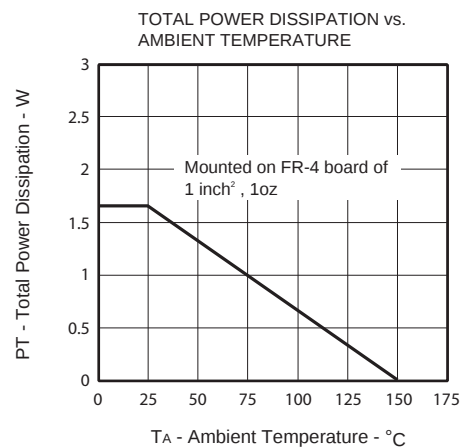
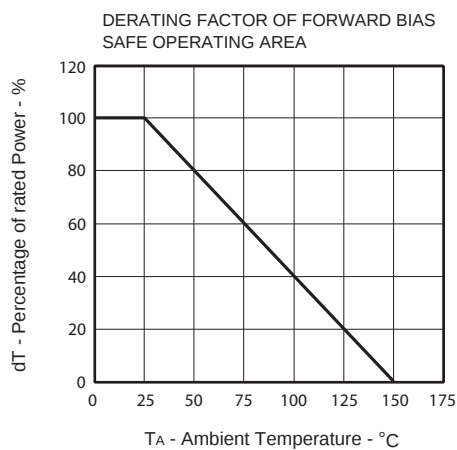
Notes

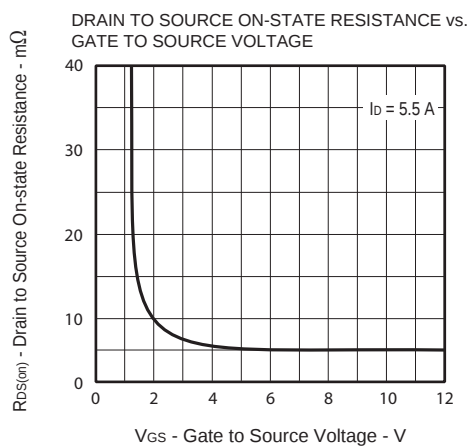
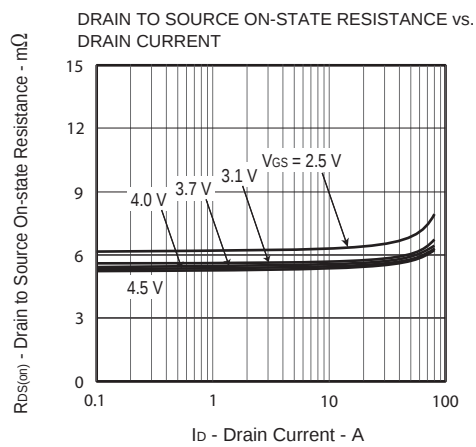
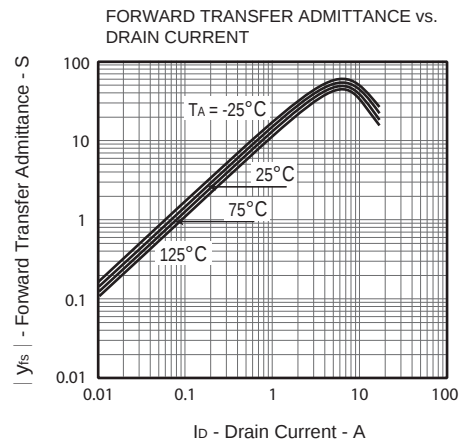
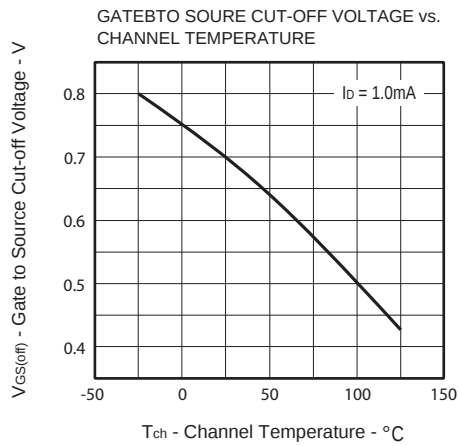
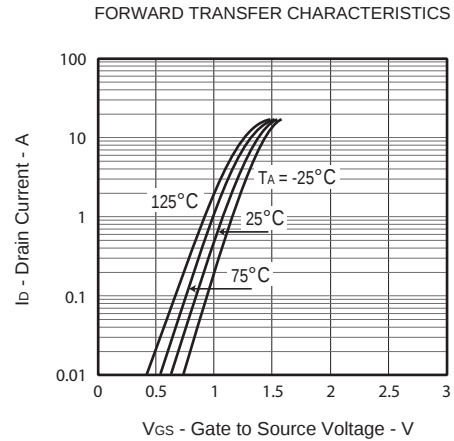
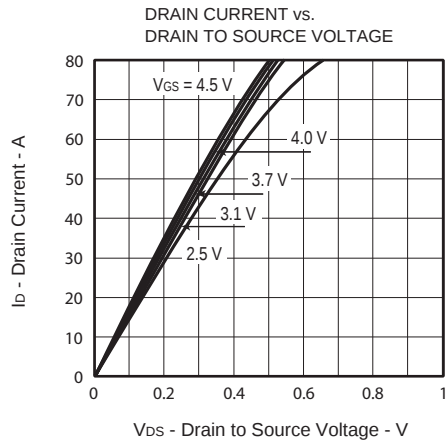
- a. Pulse Test: Pulse Width ≤ 10us, Duty Cycle ≤ 1%.
- b. Guaranteed by design, not subject to production testing.
- c. Drain current limited by maximum junction temperature.
- d. Mounted on FR4 Board of 1 inch², 2oz.

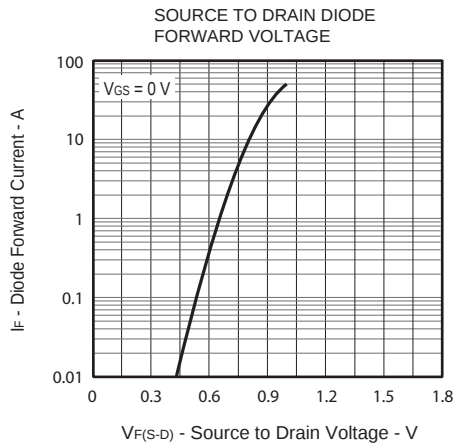
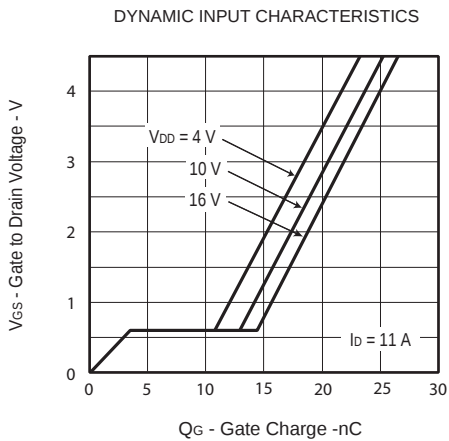
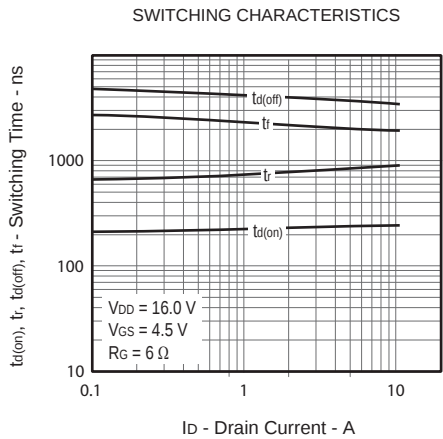
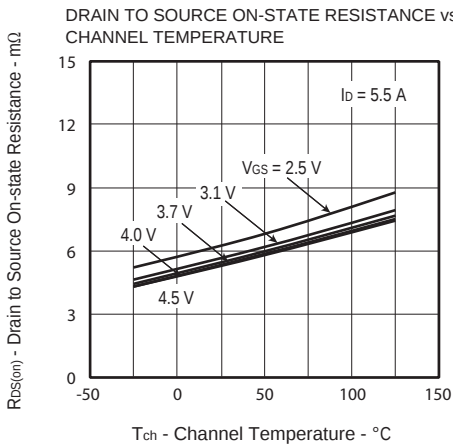
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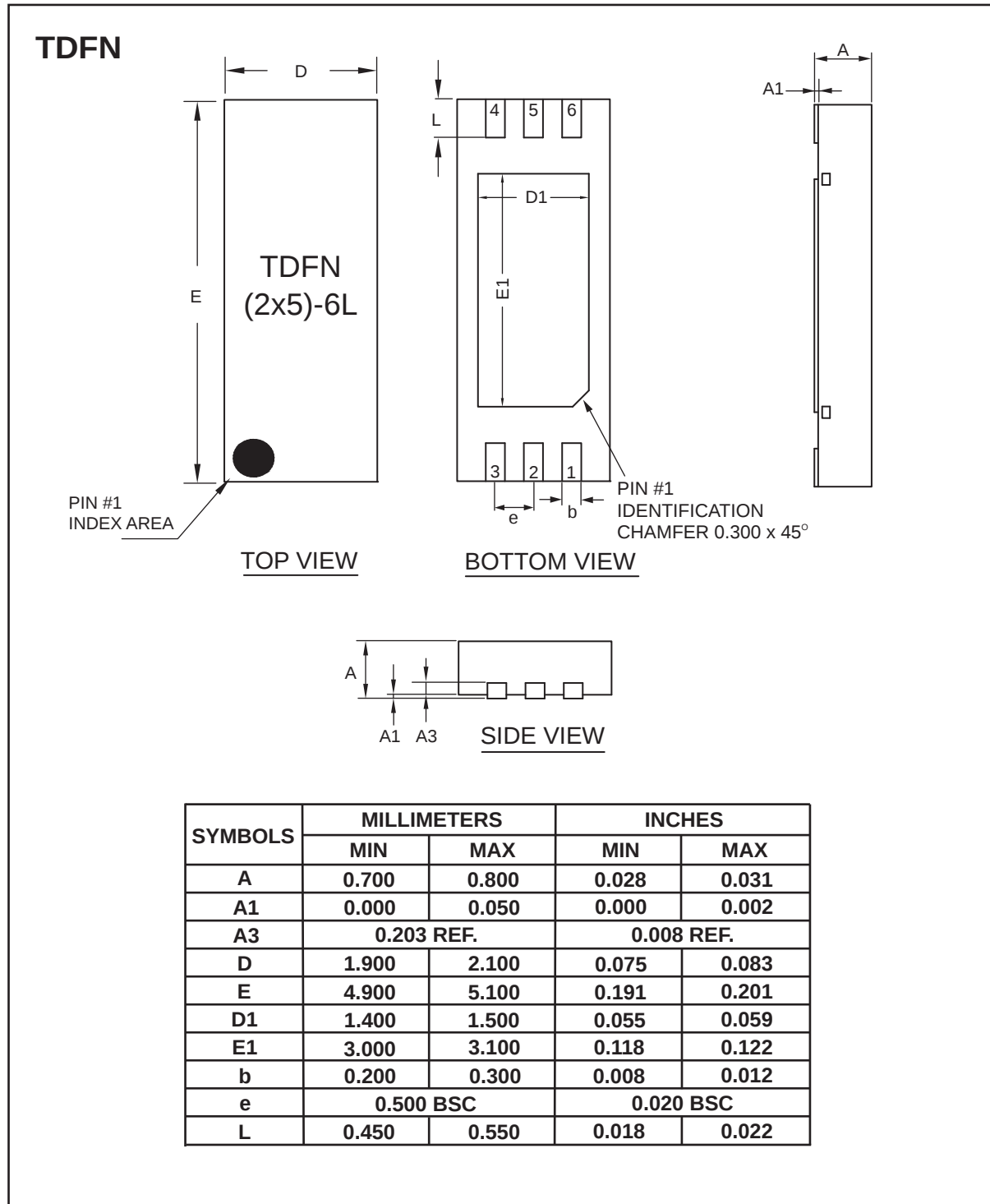
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PACKAGE OUTLINE DIMENSIONS



TOP MARKING DEFINITION

