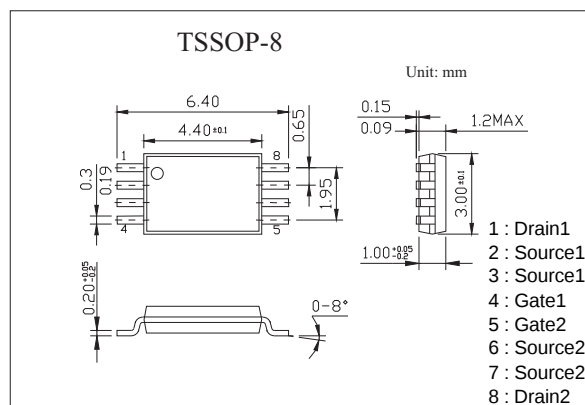
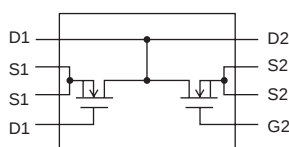


Dual N-Channel Enhancement Mode MOSFET

FTD2019

■ Features

- $R_{DS(ON)}=28m\Omega$ Max. @ $V_{GS}=4V$
- $R_{DS(ON)}=35m\Omega$ Max. @ $V_{GS}=2.5V$



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 10	V
Drain-Current	I_D	5	A
		20	A
Power Dissipation	P_D	1.3	W
Thermal Resistance, Junction- to-Ambient	$R_{\theta JA}$	96	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	$^\circ\text{C}$

Note: 1. $PW \leq 10\mu s$, duty cycle $\leq 1\%$

2. Mounted on a ceramic board ($1000\text{mm}^2 \times 0.8\text{mm}$)

FTD2019

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	V _{GS} =0V, I _D =1mA	30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =30V, V _{GS} =0V			1	μA
Gate-Body Leakage	I _{GSS}	V _{GS} =±8V, V _{DS} =0V			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	0.4		1.3	V
Drain- Source on-state Resistance	R _{DS(on)}	V _{GS} =4V, I _D =5A			28	mΩ
		V _{GS} =2.5V, I _D =2A			35	mΩ
Input Capacitance	C _{iss}	V _{DS} = 10V, V _{GS} = 0V, f = 1.0MHz		1300		pF
Output Capacitance	C _{oss}			280		pF
Reverse Transfer Capacitance	C _{rss}			160		pF
Turn-On Delay Time	t _{D(on)}	V _{DD} =15V, I _D =5A, V _{GS} =4V, R _L =3Ω, R _{GEN} =50Ω		18		ns
Rise Time	t _r			115		ns
Turn-Off Delay Time	t _{D(off)}			130		ns
Fall Time	t _f			145		ns
Total Gate Charge	Q _g	V _{DS} = 10V, I _D = 5A, V _{GS} = 10V		50		nC
Gate-Source Charge	Q _{gs}			2.5		nC
Gate-Drain Charge	Q _{gd}			5		nC
Diode Forward Voltage	V _{SD}	I _S =5A, V _{GS} =0			1.2	V

■ Marking

Marking	2019
---------	------