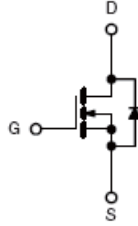


**:95HI F9`**

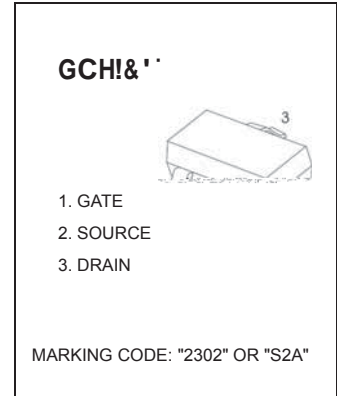
TrenchFET Power MOSFET

**5DD@=7 5H-CBG`**

- Load Switch for Portable Devices
- DC/DC Converter



**9e i]jU`Ybh` 7]fWi]h`**



**AUI]a i a `fUh]b [g`flH<sub>0</sub>1&)°C` i b`Ygg`ch\Yfk]gY`bchYXL`**

DUfU a YhYf`	Gma Vcl	JU` i Y	I b]h
Drain-Source Voltage	$V_{DS}$	20	V
Gate-Source Voltage	$V_{GS}$	±8	
Continuous Drain Current	$I_D$	4.0	A
Continuous Source-Drain Current(Diode Conduction)	$I_S$	0.6	
Power Dissipation	$P_D$	0.35	W
Thermal Resistance from Junction to Ambient (tm5s)	$R_{JA}$	357	°C/W
Operating Junction	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-55 ~+150	

**Electrical characteristics (T<sub>a</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
<b>Static</b>						
Drain-source breakdown voltage	V <sub>(BR)DSS</sub>	V <sub>GS</sub> = 0V, I <sub>D</sub> = 10μA	20			V
Gate-threshold voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> = 50μA	0.5	0.95	1.25	
Gate-body leakage	I <sub>GSS</sub>	V <sub>DS</sub> = 0V, V <sub>GS</sub> = ±8V			±100	nA
Zero gate voltage drain current	I <sub>DSS</sub>	V <sub>DS</sub> = 20V, V <sub>GS</sub> = 0V			1	μA
Drain-source on-resistance <sup>a</sup>	r <sub>DS(on)</sub>	V <sub>GS</sub> = 4.5V, I <sub>D</sub> = 4.0A		0.021	0.027	δ
		V <sub>GS</sub> = 2.5V, I <sub>D</sub> = 3.0A		0.029	0.037	
Forward transconductance <sup>a</sup>	g <sub>fs</sub>	V <sub>DS</sub> = 5V, I <sub>D</sub> = 3.6A		8		S
Diode forward voltage	V <sub>SD</sub>	I <sub>S</sub> = 0.94A, V <sub>GS</sub> = 0V		0.76	1.2	V
<b>Dynamic</b>						
Total gate charge	Q <sub>g</sub>	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 4.5V, I <sub>D</sub> = 3.6A		4.0		nC
Gate-source charge	Q <sub>gs</sub>			0.65		
Gate-drain charge	Q <sub>gd</sub>			1.5		
Input capacitance <sup>b</sup>	C <sub>iss</sub>	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 0V, f = 1MHz		300		pF
Output capacitance <sup>b</sup>	C <sub>oss</sub>			120		
Reverse transfer capacitance <sup>b</sup>	C <sub>rss</sub>			80		
<b>Switching<sup>b</sup></b>						
Turn-on delay time	t <sub>d(on)</sub>	V <sub>DD</sub> = 10V, R <sub>L</sub> = 5.5 Ω, I <sub>D</sub> = 3.6A, V <sub>GEN</sub> = 4.5V, R <sub>g</sub> = 6Ω		7		ns
Rise time	t <sub>r</sub>			55		
Turn-off delay time	t <sub>d(off)</sub>			16		
Fall time	t <sub>f</sub>			10		

**Notes :**

- Pulse Test : Pulse width 300μs, duty cycle 2%.
- These parameters have no way to verify.

Hmd]WU`7 \UfUWhYf]gh]Wg

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