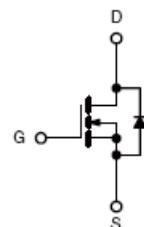


:95H1F9:

TrenchFET Power MOSFET

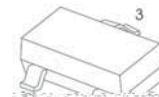
5DD@-75H-CBG

- Load Switch for Portable Devices
- DC/DC Converter



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

GCH!&..



1. GATE
2. SOURCE
3. DRAIN

TCEÜSIPÖ|ÓUÖÖKAGHEGÅUÜÅÜGCEÅ

AUI]a i a 'fUh]b[g`fH_1&)°C` i b`Ygg`ch\Yfk]gY`bchYXL`

DUFU a YhYf`	Gm a 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	1E	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 ($T_a=25^\circ C$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Units
Static						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = 10\mu A$	20			V
Gate-threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 50\mu A$	0.1	0.95	1.21	
Gate-body leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 8V$			± 100	nA
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 20V, V_{GS} = 0V$			1	μA
Drain-source on-resistance ^a	$r_{DS(on)}$	$V_{GS} = 4.5V, I_D = 1.6\mu A$		0.0GF	0.0G1	$\hat{\Omega}$
		$V_{GS} = 2.5V, I_D = 3.6\mu A$		0.0GJ	0.0H1	
Forward transconductance ^a	g_{fs}	$V_{DS} = 5V, I_D = 3.6A$		8		S
Diode forward voltage	V_{SD}	$I_S = 0.94A, V_{GS} = 0V$		0.76	1.2	V
Dynamic						
Total gate charge	Q_g	$V_{DS} = 10V, V_{GS} = 4.5V, I_D = 3.6A$		4.0		nC
Gate-source charge	Q_{gs}			0.65		
Gate-drain charge	Q_{gd}			1.5		
Input capacitance ^b	C_{iss}	$V_{DS} = 10V, V_{GS} = 0V, f = 1MHz$		300		pF
Output capacitance ^b	C_{oss}			120		
Reverse transfer capacitance ^b	C_{rss}			80		
Switching^b						
Turn-on delay time	$t_{d(on)}$	$V_{DD} = 10V,$ $R_L = 5.5\Omega, I_D = 3.6A,$ $V_{GEN} = 4.5V, R_g = 6\Omega$		7		ns
Rise time	t_r			55		
Turn-off delay time	$t_{d(off)}$			16		
Fall time	t_f			10		

Notes :

- a. Pulse Test : Pulse width 300μs, duty cycle 1%.
- b. These parameters have no way to verify.

Hmd]WU`'7 \UfUWhYf]gh]Wg

