

Features

- · Split Gate Trench MOSFET Technology
- Low R_{DS(on)} & FOM
- · Excellent Stability and Uniformity
- Extremely Low Switching Loss
- · Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 3
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

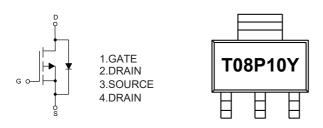
- Operating Junction Temperature Range : -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 56.8°C/W Junction to Ambient^(Note 2)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V _{DS}	-100	V
Gate-Source Volltage	V _{GS}	±20	V
Continuous Drain Current	I _D	-8	Α
Pulsed Drain Current (Note 3)	I _{DM}	-32	Α
Total Power Dissipation	P _D	2.2	W

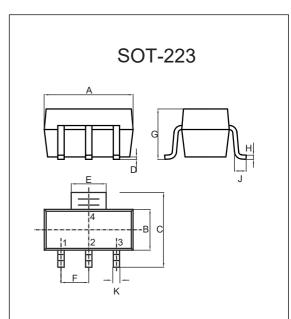
Note:

- 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2. Surface mounted on FR4 board , t≤10s.
- 3. Repetitive rating: Pulse width limited by junction temperature.

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P-CHANNEL MOSFET



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.248	0.264	6.30	6.70		
В	0.130	0.146	3.30	3.70		
С	0.264	0.287	6.70	7.30		
D	0.001	0.004	0.02	0.10		
Е	0.114	0.122	2.90	3.10		
F	0.091		2.30		TYP.	
G		0.071		1.80		
Н	0.009	0.014	0.23	0.35		
J	0.030		0.75			
K	0.026	0.033	0.66	0.84		

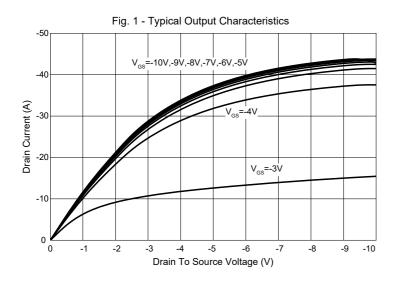


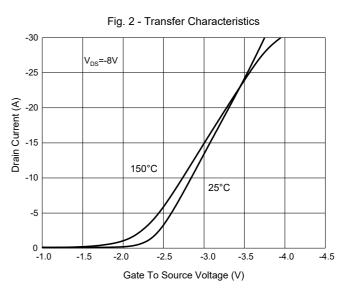
Electrical Characteristics @ 25°C (Unless Otherwise Specified)

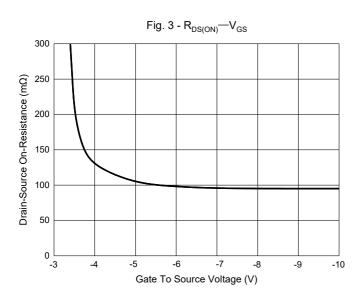
Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit	
Static Characteristics				1	1		
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} =0V, I _D =-250μA	-100			V	
Gate-Source Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA	
7	I _{DSS}	V _{DS} =-100V, V _{GS} =0V			-1	μA	
Zero Gate Voltage Drain Current		V _{DS} =-100V, V _{GS} =0V, T _J =55°C			-5	μA	
Gate-Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250μA	-1	-1.8	-2.5	V	
		V _{GS} =-10V, I _D =-8A		95	110	mΩ	
Drain-Source On-Resistance	$R_{DS(on)}$	V _{GS} =-4.5V, I _D =-5A		103	130	mΩ	
Diode Characteristics							
Continuous Body Diode Current	Is				-8	А	
Diode Forward Voltage	V _{SD}	V _{GS} =0V, I _S =-8A		-0.9	-1.3	V	
Reverse Recovery Time	t _{rr}	L 50 11/11 4000/		70		ns	
Reverse Recovery Charge	Q _{rr}	I _S =-5A,di/dt=100A/μs		140		nC	
Dynamic Characteristics							
Input Capacitance	C _{iss}			1050			
Output Capacitance	C _{oss}	V _{DS} =-80V,V _{GS} =0V,f=1MHz		97		pF	
Reverse Transfer Capacitance	C _{rss}			18		1	
Total Gate Charge	Qg			20			
Gate-Source Charge	Q _{gs}	V _{DS} =-50V,V _{GS} =-10V,I _D =-5A		3.9		nC	
Gate-Drain Charge	Q_{gd}			4.3			
Turn-On Delay Time	t _{d(on)}			10			
Turn-On Rise Time	t _r	V_{GS} =-10V, V_{DD} =-50V, R_{L} =2.5 Ω		30		200	
Turn-Off Delay Time	t _{d(off)}	R_{GEN} =6 Ω		77		ns	
Turn-Off Fall Time	t _f			81			

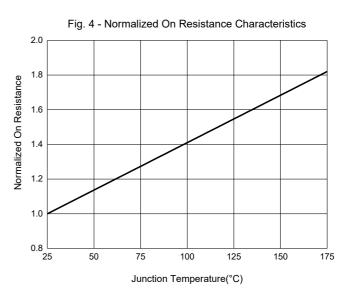


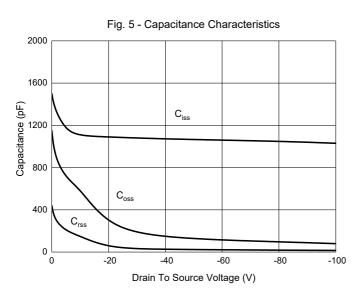
Curve Characteristics

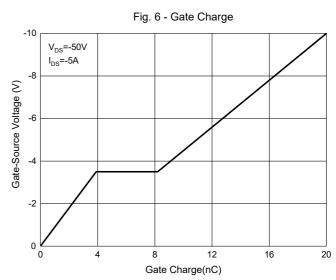






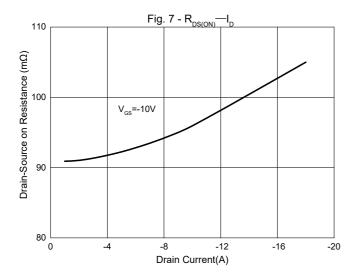


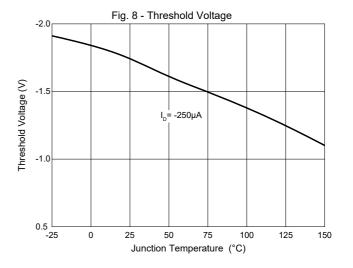






Curve Characteristics







Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	

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