

Features

- Advanced Trench Process Technology
- Low Threshold Voltage
- Fast Switching Speed
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

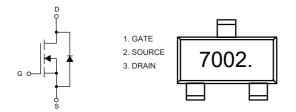
Maximum Ratings

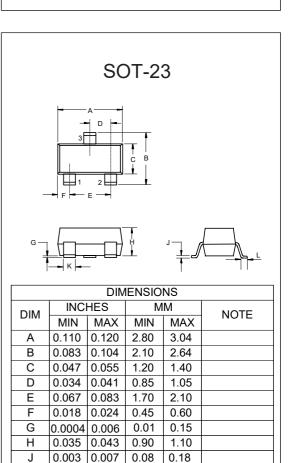
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V _{DS}	60	V	
Gate-Source Voltage	V _{GS}	±20	V	
Drain Current-Continuous	I _D	0.115	А	
Power Dissipation	P _D	0.2	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.

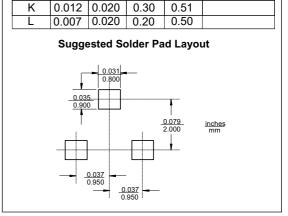
Internal Structure and Marking Code





N-Channel

MOSFET



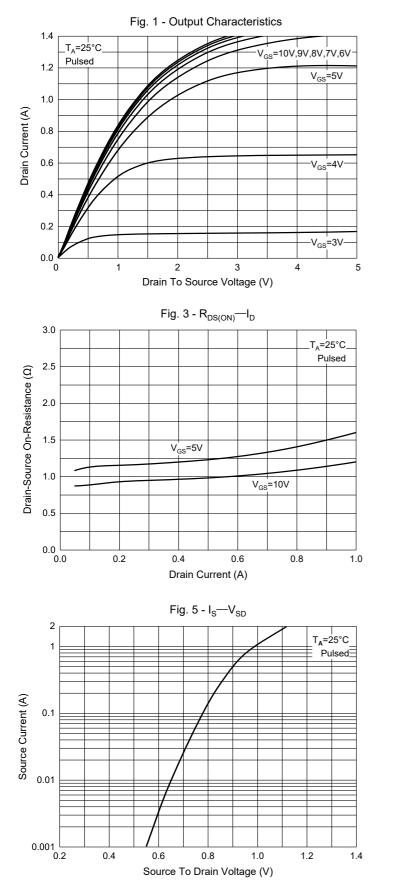


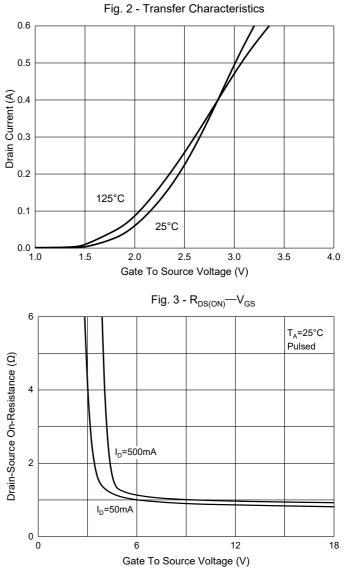
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit	
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} =0V, Ι _D =10μΑ	60			V	
Gate-Threshold Voltage	V _{GS(th)}	$V_{DS}=V_{GS}$, $I_{D}=250\mu A$	1.6		1.8	V	
Gate-Body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA	
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			80	nA	
		V _{DS} =60V, V _{GS} =0V,T _J =125 °C			1.0	μA	
On-State Drain Current	I _{D(on)}	V _{DS} =7.5V, V _{GS} =10V	500	2700		mA	
Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =500mA		1.2	7.5	Ω	
		V_{GS} =5V, I _D =50mA		1.7	7.5		
Drain-Source On-Voltage	V _{DS(on)}	V _{GS} =10V, I _D =500mA			3.75	- V	
		V _{GS} =5V, I _D =50mA			1.5		
Forward Transconductance	g _{fs}	V _{DS} =10V, I _D =200mA	80			ms	
Diode Forward Voltage	V _{SD}	V _{GS} =0V, I _S =115mA			1.5	V	
Maximum Continuous Drain-Source Diode Forward Current	ا _S				115	mA	
Input Capacitance	C _{iss}				50		
Output Capacitance	C _{oss}	V _{DS} =25V,V _{GS} =0V, f=1MHz			25	pF	
Reverse Transfer Capacitance	C _{rss}				5		
Turn-On Time	t _{d(on)}	V_{DD} =30V, V_{GEN} =10V, R_{L} =150 Ω ,			20	ns	
Turn-Off Time	t _{d(off)}	I_D =200mA,R _{GEN} =25 Ω			20	113	



Curve Characteristics







Ordering Information

Device	Packing		
Part Number-TP	Tape&Reel:3Kpcs/Reel		

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