

Features

- Low Gate Threshold Voltage
- · Low Input Capacitance
- · Low On-Resistance
- · Epoxy Meets UL 94 V-0 Flammability Rating
- · Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

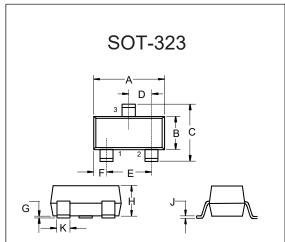
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

Parame	Symbol	Rating	Unit	
Drain-Source Voltage		V _{DS}	60	V
Gate-Source Voltage Continuous		\/	±20	V
	Pulsed	V_{GS}	±40	V
Drain-Gate Voltage	R _{GS} ≤1.0MΩ	V_{DGR}	60V	V
Drain Current(1)	Continuous	I _D	0.115	Α
	Continuous@100°C Pulsed		0.073	Α
			0.80	Α
Power Dissipation ⁽¹⁾		P_{D}	0.20	W
Derating above T _A =25°C			1.60	mW/ºC

Internal Structure

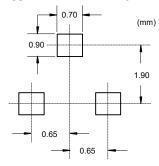


N-Channel MOSFET



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.071	0.087	1.80	2.20		
В	0.045	0.053	1.15	1.35		
С	0.083	0.096	2.10	2.45		
D	0.026		0.65		TYP.	
E	0.047	0.055	1.20	1.40		
F	0.012	0.016	0.30	0.40		
G	0.000	0.004	0.00	0.10		
Н	0.035	0.044	0.90	1.10		
J	0.002	0.010	0.05	0.25		
K	0.006	0.016	0.15	0.40		

Suggested Solder Pad Layout





ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

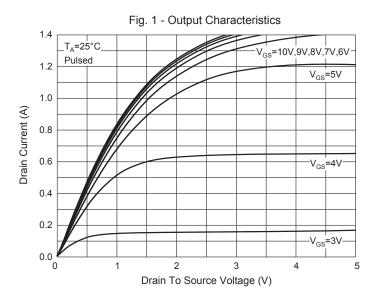
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit	
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V_{GS} =0V, I_D =10 μ A	60	70		V	
Gate-Threshold Voltage ⁽²⁾	$V_{GS(th)}$	$V_{DS}=V_{GS}$, $I_{D}=250\mu A$	1.0		2.0	V	
Gate-Body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±10	μA	
Zero Gate Voltage Drain Current		V _{DS} =60V, V _{GS} =0V,T _C =25°C			1.0	μА	
	I _{DSS}	V _{DS} =60V, V _{GS} =0V,T _C =125°C			500		
On-State Drain Current	I _{D(on)}	V _{DS} =7.5V, V _{GS} =10V	500	1000		mA	
Drain-Source On-Resistance ⁽²⁾	R _{DS(on)}	V _{GS} =10V, I _D =500mA		4.4	13.5	0	
		V _{GS} =5V, I _D =50mA		3.2	7.5	Ω	
Forward Transconductance	9 _{fs}	V _{DS} =10V, I _D =200mA	80			ms	
Input Capacitance	C _{iss}			22	50		
Output Capacitance	C _{oss}	V _{DS} =25V,V _{GS} =0V, f=1MHz		11	25	pF	
Reverse Transfer Capacitance	C _{rss}			2	5		
Turn-On Time	t _{d(on)}	V_{DD} =30V, V_{GEN} =10V, R_{L} =150 Ω ,		7	20		
Turn-Off Time	$t_{d(off)}$	I_D =200mA, R_{GEN} =25 Ω		11	20	ns	

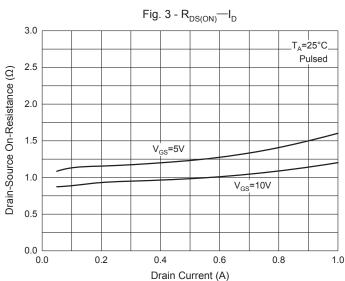
Note: 1. Valid Provided That Terminals are Kept at Specified Ambient Temperature.

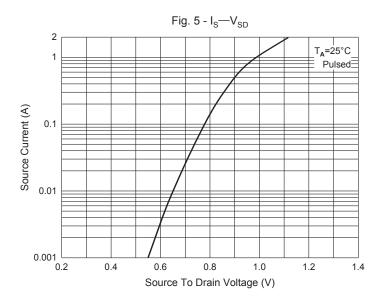
^{2.} Pulse Test: Pulse Width \leq 300µs, Duty Cycle \leq 2%.

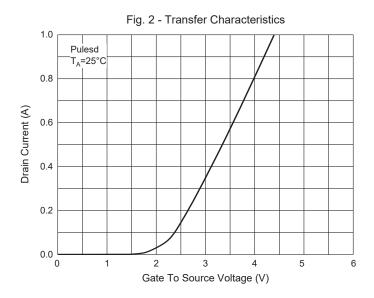


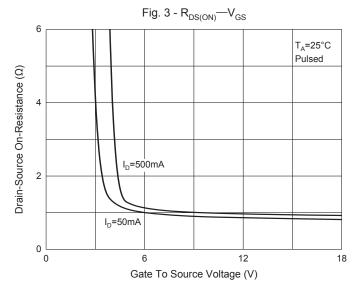
Curve Characteristics













Ordering Information

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

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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