

N-Channel 50-V(D-S) MOSFET	SOT-23 Plastic-Encapsulate MOSFETS			
<p><u>SOT-23</u></p> <p>1.GATE 2.SOURCE 3.DRAIN</p> <p>Equivalent Circuit:</p>	<p>Features</p> <ul style="list-style-type: none"> • Rugged and Reliable • High density cell design for extremely low RDS(on) • ESD Protected <p>Application</p> <ul style="list-style-type: none"> ※ Direct Logic-Level Interface: TTL/CMOS ※ Drivers: Relays, Solenoids, Lamps, Hammers, Display, Memories, Transistors, etc. ※ Battery Operated Systems ※ Solid-State Relays <p>MARKING:</p>			
<p>V(BR)DSS</p> <p>50 V</p>	<p>RDS(on)MAX</p> <table border="1"> <tr> <td>2Ω@10V</td> <td rowspan="2">300mA</td> </tr> <tr> <td>3Ω@4.5V</td> </tr> </table>	2Ω@10V	300mA	3Ω@4.5V
2Ω@10V	300mA			
3Ω@4.5V				

Mosfet Maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	50	V
Gate-Source Voltage	VGS	±20	
Continuous Drain Current	ID	0.3	A
Continuous Source-Drain Current(Diode Conduction)	IS	1.3	
Power Dissipation	PD	0.35	W
Thermal Resistance from Junction to Ambient	R _{θJA}	357	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~+150	°C

MOSFET ELECTRICAL CHARACTERISTICS

unless otherwise specified $T_a = 25^\circ C$

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Characteristics						
Drain-source breakdown voltage	V(BR)DSS	$V_{GS} = 0V, ID = 250\mu A$	50			V
Gate-threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, ID = 250\mu A$	0.8		1.6	V
Gate-body leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 20V$			± 1	μA
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 30V, V_{GS} = 0V$			1	μA
Drain-source on-resistancea	RDS(on)	$V_{GS} = 10V, ID = 300mA$		1.1	2	Ω
		$V_{GS} = 4.5V, ID = 300mA$		1.2	3	Ω
Forward transconductancea	g_{fs}	$V_{DS} = 10V, ID = 300mA$	0.12			S
Diode forward voltage	V_{SD}	$I_S = 100mA, V_{GS} = 0V$		0.8	1.28	V
Dynamic Characteristics						
Input capacitance	C_{iss}	$V_{DS} = 25V, V_{GS} = 0V, f = 1MHz$		27		pF
Output capacitance	C_{oss}			13		pF
Reverse transfer capacitanceb	C_{rss}			6		pF
Switchingb Characteristics						
Turn-on delay time	$t_{d(on)}$	VDD=30V $R_g=2\Omega, ID = 220mA,$ $V_{GEN}=4.5V, RL=3\Omega$			5	ns
Rise time	t_r				18	ns
Turn-off delay time	$t_{d(off)}$				36	ns
Fall time	t_f				14	ns

Note :

1. These parameters have no way to verify.
2. Pulse Test ; Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.

单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)