



《风光欣》技术资料

2N7002

MOSFET(N-CHANNEL)

Power dissipation

PD:0.35W($T_{amb}=25$)

Drain current

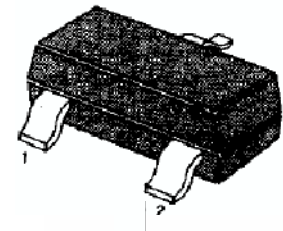
I_D :250mA

Drain-source Voltage

V_{DS} : 60V

Operating and storage junction temperature range

T_J, T_{stg} : -55 to+150



1.GATE 2.SOURCE 3.DRAIN

ELECTRICAL CHARACTERISTICS ($T_A=25$)

Parameter	Symbol	Testconditons	MIN	TYP	MAX	UNIT
Drain-source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=10\mu A$	60	70		V
Gate-Threshold Voltage	$V_{(BR)GS}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1	1.5	2.5	V
Gate-body Leakage	I_{GSS}	$V_{DS}=0V, V_{GS}=20V$			100	nA
Zerp Gate VP;tage Draom Cirrem	I_{DSS}	$V_{DS}=60V, V_{GS}=0V$			1	μA
		$V_{DS}=60V, V_{GS}=0V, T=125$			500	
On-stateDrainCurrent	$I_{D(ON)}$	$V_{GS}=10V, V_{DS}=7.5V$	800	1300		mA
		$V_{GS}=5V, V_{DS}=5V$	500	1000		
Drain-SiurceOn-Res9istance	$R_{DS(ON)}$	$V_{GS}=5V, I_D=50mA$		1.5	2.6	
		$V_{GS}=10V, I_D=500mA$		1.4	2.5	
Forward Tranceconductance	g_{fs}	$V_{DS}=10V, I_D=200mA$	80			ms
	V_{SD}	$I_S=200mA, V_{GS}=0V$		0.85	1.2	V
Diode Forward Votage	Q_G	$V_{DS}=30V, V_{GS}=10V$		0.6	1.0	nC
Tota l Gate Change	Q_{GS}	$I_D=250mA$		0.06		
Gate-Drain Charge	Q_{gd}			0.006		
Input Capacitance	C_{ISS}	$V_{DS}=25V, V_{GS}=0V$		22	50	PF
Output capacitance	C_{OSS}	$f=1MHz$		11	25	
Reverse Transfer Capaciance	C_{RSS}			2	5	

SWITCHING

Turn-on Time	$t_{d(on)}$	$V_{DD}=30V, R_L=200$ $I_D=100mA, I_{GEN}=10V$	7.5	20		ns
	t_r		6			
turn-off Time	$t_{d(off)}$	$R_G=10\Omega$	7.5	20		ns
	t_r		3			