



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-363 Plastic-Encapsulate Transistors

2N7002DW MOSFET (N-Channel)

FEATURES

Power dissipation

P_D : 0.2 W ($T_{amb}=25^{\circ}C$)

Collector current

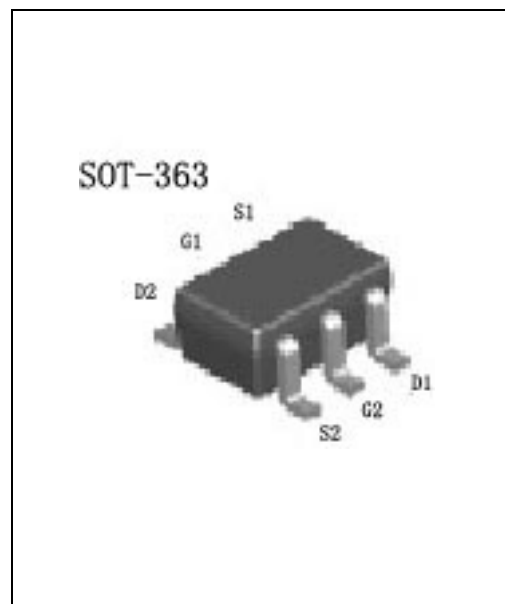
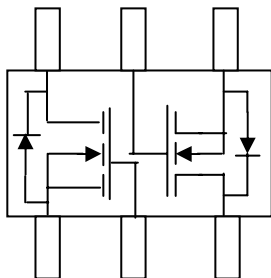
I_D : 115 mA

Collector-base voltage

V_{DS} : 60 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Drain-Source Breakdown Voltage *	$V_{(BR)DSS}$	$V_{GS}=0$ V, $I_D=10$ μ A	60	70		V
Gate-Threshold Voltage*	$V_{th(GS)}$	$V_{DS}=V_{GS}$, $I_D=250$ μ A	1	1.5	2	
Gate-body Leakage*	I_{GSS}	$V_{DS}=0$ V, $V_{GS}=\pm 20$ V			± 10	nA
Zero Gate Voltage Drain Current *	I_{DSS}	$V_{DS}=60$ V, $V_{GS}=0$ V			1	μ A
		$V_{DS}=60$ V, $V_{GS}=0$ V, $T_j=125$			500	
On-state Drain Current *	$I_{D(ON)}$	$V_{GS}=10$ V, $V_{DS}=7.5$ V	500	1000		mA
Drain-Source On-Resistance *	$r_{DS(on)}$	$V_{GS}=5$ V, $I_D=50$ mA		3.2	7.5	Ω
		$V_{GS}=10$ V, $I_D=500$ mA		4.4	13.5	
Forward Transconductance *	g_{FS}	$V_{DS}=10$ V, $I_D=200$ mA	80			ms
Input Capacitance	C_{iss}	$V_{DS}=25$ V, $V_{GS}=0$ V $f=1$ MHz		22	50	pF
Output Capacitance	C_{oss}			11	25	
Reverse Transfer Capacitance	C_{rss}			2	5	

SWITCHING

Turn-on Time	$t_{d(on)}$	$V_{DD}=30$ V, $R_L=150$ Ω $I_D=200$ mA, $V_{GEN}=10$ V $R_G=25$ Ω		7	20	ns
Turn-off Time	$t_{d(off)}$			11	20	

* Pulse test, pulse width $\leq 300\mu$ s, duty cycle $\leq 2\%$.

Marking: K72