MOSFET (N-CHANNEL) **Plastic-Encapsulate Transistor**

FEATURES

Power dissipation

P_D : 0.225W (Tamb=25°C)

Drain current

I_D : 115mA

Drain-Sourse Voltage

V_{DS} : 60 V

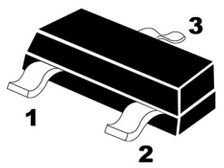
Operating and storage junction temperature range

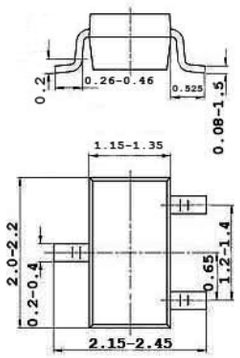
T_J, T_{stg} : -55°C to +150°C

Marking:K72

SOT-323

1. GATE
2. SOURCE
3. DRAIN





UNIT:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS}=0V, I_D=10μA V_{GS}=0V, I_D=3mA	60 60			V
Gate-Threshold Voltage	$V_{th\ (GS)}$	V_{DS}=V_{GS}, I_D=250μA	1	1.5	2.5	
Gate-Body Leakage	I_{GSS}	V_{DS}=0V, V_{GS}=±25V			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V, V_{GS}=0V V_{DS}=60V, V_{GS}=0V, T_j=125			1 500	μA
On-State Drain Current	$I_{D(ON)}$	V_{GS}=10V, V_{DS}=7V	500			mA
Drain-Source On-Resistance	$r_{DS(ON)}$	V_{GS}=10V, I_D=500mA V_{GS}=5V, I_D=50mA		1.5 2.0	7.5 7.5	Ω
Forward Tran Conductance	g_{ts}	V_{DS}=10V, I_D=200mA	80	300		ms
Diode Forward Voltage	V_{SD}	I_s=115mA, V_{GS}=0V		0.85	1.2	V
Input Capacitance	C_{iss}	V_{DS}=25V, V_{GS}=0V, f=1MHz		25	50	pF
Output Capacitance	C_{OSS}			6	25	
Reverse Transfer Capacitance	C_{RSS}			1.2	5	

SWITCHING TIME

Turn-on Time	$t_{d(on)}$	V_{DD}=25V, R_L=50Ω, I_D=500mA, V_{GEN}=10V, R_G=25Ω		7.5	20	ns
Turn-off Time	$t_{d(off)}$			7.5	20	

RoHS Pb-free TIP Semiconductor