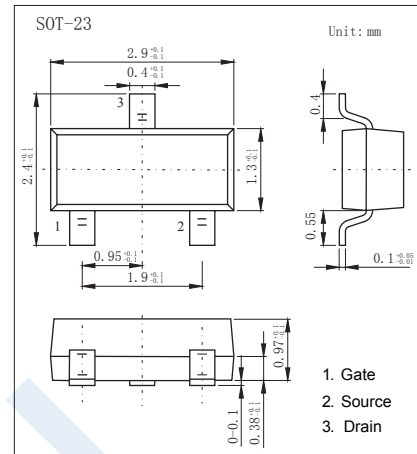
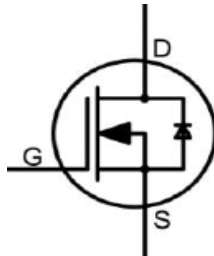


N-Channel MOSFET

DMZ6005E (KMZ6005E)

■ Features

- $V_{DS} (V) = 600V$
- $I_D = 20mA$
- $R_{DS(ON)} < 700m\Omega$ ($V_{GS} = 0V$)
- Fast Switching Speed
- RoHS Compliant
- Halogen-free available



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	600	V
Drain-Gate Voltage	V_{DG}	600	
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	20	mA
Pulsed Drain Current	I_{DM}	80	
Power Dissipation	P_D	500	mW
Thermal Resistance.Junction- to-Ambient	R_{thJA}	250	$^\circ C/W$
Soldering Temperature	T_L	300	$^\circ C$
Junction Temperature	T_J	150	
Storage Temperature Range	T_{stg}	-55 to 150	

N-Channel MOSFET

DMZ6005E (KMZ6005E)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =250 μ A, V _{GS} =-5V	600			V
Saturated Drain-to-Source Current	I _{DSS}	V _{GS} =0V, V _{DS} =25V	5		25	mA
Drain-to-Source Leakage Current	I _{D(OFF)}	V _{DS} =600V, V _{GS} =-5V			0.1	μA
		V _{DS} =600V, V _{GS} =-5V, T _J = 125°C			10	
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±20	
Gate-to-Source Cut-off Voltage	V _{GS(OFF)}	V _{DS} =3V, I _D =8 μA	-3		-1.8	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =0V, I _D =3mA			700	Ω
Forward Transconductance	g _{FS}	V _{DS} =10V, I _D =5mA		15.4		mS
Input Capacitance	C _{iss}	V _{GS} =-5V, V _{DS} =25V, f=1MHz		12.3		pF
Output Capacitance	C _{oss}			2.6		
Reverse Transfer Capacitance	C _{rss}			1.8		
Total Gate Charge	Q _g	V _{GS} =-5~5V, V _{DS} =300V, I _D =7mA		1.55		nC
Gate Source Charge	Q _{gs}			0.12		
Gate Drain Charge	Q _{gd}			0.56		
Turn-On DelayTime	t _{d(on)}	V _{GS} = -5V~5V V _{DD} = 300V, I _D =7mA R _G = 20Ω		4		ns
Turn-On Rise Time	t _r			9		
Turn-Off DelayTime	t _{d(off)}			14		
Turn-Off Fall Time	t _f			84		
Diode Forward Voltage	V _{SD}	I _S =3mA, V _{GS} =-10V			1.2	V

Note.: Pulse width≤380μs; duty cycles≤2%.

■ Marking

Marking	605E
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N-Channel MOSFET DMZ6005E (KMZ6005E)

■ Typical Characteristics

