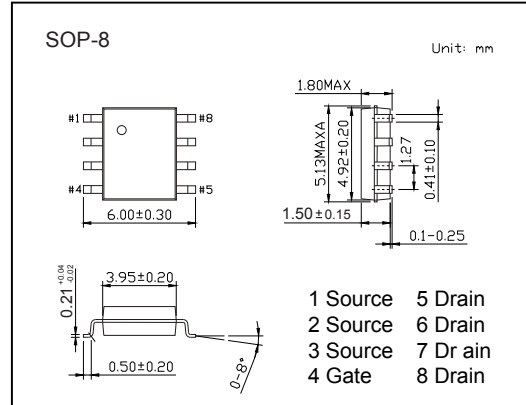


## P-Channel MOSFET

### KX5P02

#### ■ Features

- $V_{DS} = -20V$
- $I_D = -5 A$  ( $V_{GS} = -10V$ )
- $R_{DS(ON)} < 50m\Omega$  ( $V_{GS} = -10V$ )
- $R_{DS(ON)} < 85m\Omega$  ( $V_{GS} = -4.5V$ )



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	-20	V
Gate-Source Voltage	$V_{GS}$	$\pm 10$	
Continuous Drain Current	$I_D$	-5	A
Power Dissipation	$P_D$	2	W
Thermal Resistance Junction- to-Ambient	$R_{thJA}$	62.5	$^\circ C/W$
Junction Temperature	$T_J$	150	$^\circ C$
Junction Storage Temperature Range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = -250 \mu A, V_{GS} = 0V$	-20			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -18V, V_{GS} = 0V$			-1	$\mu A$
Gate-Body leakage current	$I_{GSS}$	$V_{DS} = 0V, V_{GS} = \pm 10V$			$\pm 100$	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250 \mu A$	-0.4		-0.9	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -10V, I_D = -5A$			50	$m\Omega$
		$V_{GS} = -4.5V, I_D = -4A$			85	
Forward Transconductance	$g_{FS}$	$V_{DS} = -5V, I_D = -5A$	4			S
Maximum Body-Diode Continuous Current	$I_S$				-1.3	A
Diode Forward Voltage	$V_{SD}$	$I_S = -1.3A, V_{GS} = 0V$			-1.1	V

#### ■ Marking

Marking	5P02 K***
---------	--------------