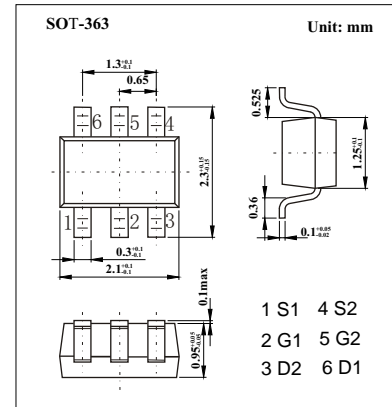
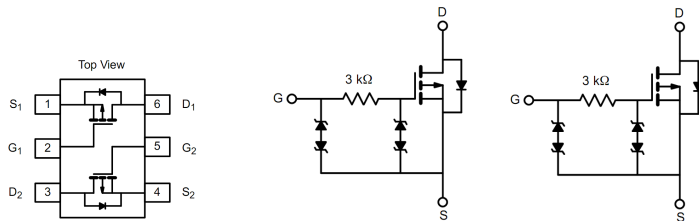


Dual P-Channel MOSFET KI1917

■ Features

- $V_{DS} = -12V, I_D = -1.0A$
- $R_{DS(on)} = 370m\Omega @ V_{GS} = -4.5V$
- ESD Protected: 3000 V
- Pb-Free Packages are Available
- Lead temperature for soldering: $T_L = 260 \pm 5^\circ C$



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

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V_{DS}	-12	V
Gate-Source Voltage	V_{GS}	± 12	V
Continuous Drain Current $T_J = 150^\circ C$ (Note 1) $T_A = 25^\circ C$ $T_A = 85^\circ C$	I_D	-1.0 -0.73	A
Pulsed Drain Current	I_{DM}	-3	A
Continuous Diode Current (Diode Conduction) (Note 1)	I_S	-0.47	A
Maximum Power Dissipation (Note 1) $T_A = 25^\circ C$ $T_A = 85^\circ C$	P_D	0.57 0.3	W
Maximum Junction-to-Foot(Drain)	$R_{\theta JF}$	100	$^\circ C/W$
Maximum Junction-to-Ambient (Note 1)	$R_{\theta JA}$	220	$^\circ C/W$
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-55 to 150	$^\circ C$

Note: 1. Surface Mounted on 1" x 1" FR4 Board.

KI1917

Electrical Characteristics $T_j = 25$ unless otherwise noted

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_D = -100\mu A$	-12			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -9.6V, V_{GS} = 0V$			1.0	μA
		$V_{DS} = -9.6V, V_{GS} = 0V, T_J = 85$			5.0	
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -100\mu A$	-0.45			V
Gate-Body Leakage	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 12V$			± 10	μA
Drain-Source On-State Resistance (Note 2)	$R_{DS(on)}$	$V_{GS} = -4.5V, I_D = -1.0A$			370	m
		$V_{GS} = -2.5V, I_D = -0.81A$			575	
		$V_{GS} = -1.8V, I_D = -0.2A$			800	
On-State Drain Current (Note 2)	$I_{D(on)}$	$V_{DS} = -5V, V_{GS} = -4.5V$	-2			A
Forward Transconductance (Note 2)	g_{fs}	$V_{DS} = -10V, I_D = -1.0A$		1.7		S
Total Gate Charge (Note 3)	Q_g	$V_{DS} = -6V, V_{GS} = -4.5V, I_D = -1.0A$		1.3	2.0	nC
Gate-Source Charge (Note 3)	Q_{gs}			0.31		
Gate-Drain Charge (Note 3)	Q_{gd}			0.31		
Turn-On Delay Time (Note 3)	$t_{d(on)}$	$V_{DS} = -6V, R_L = 12, I_D = -0.5A$ $V_{GS} = -4.5V, R_{GEN} = 6$		0.17	0.26	μs
Rise Time (Note 3)	t_r			0.47	0.71	
Turn-Off Delay Time (Note 3)	$t_{d(off)}$			0.96	1.4	
Fall Time (Note 3)	t_f			1	1.5	
Diode Forward Voltage (Note 2)	V_{SD}	$I_S = -0.47A, V_{GS} = 0V$			1.2	V

Notes: 2. Pulse test; pulse width 300 μs , duty cycle 2%.

3. Guaranteed by design, not subject to production testing.