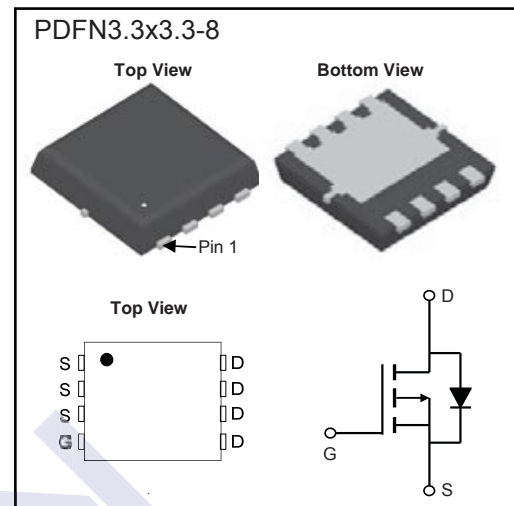


## P-Channel MOSFET

## 2KJ7118DFN

## ■ Features

- $V_{DS} = -30V$
- $I_D = -36.1 A$
- $R_{DS(on)} < 12m\Omega @ V_{GS} = -10V$
- $R_{DS(on)} < 19m\Omega @ V_{GS} = -4.5V$

■ Absolute Maximum Ratings ( $T_A = 25^\circ C$  unless otherwise noted)

Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	$V_{DS}$	-30	V	
Gate-Source Voltage	$V_{GS}$	$\pm 20$		
Continuous Drain Current	$I_D$	$T_A = 25^\circ C$	-36.1	A
		$T_A = 70^\circ C$	-28.9	
Pulsed Drain Current	$I_{DM}$	-144		
Maximum Power Dissipation	$P_D$	$T_A = 25^\circ C$	25	W
		$T_A = 70^\circ C$	16	
Thermal Resistance, Junction- to-Ambient (Note 1)	$R_{\theta JA}$	5	$^\circ C/W$	
Junction Temperature	$T_J$	150	$^\circ C$	
Storage Temperature Range	$T_{stg}$	-55 to 150		

Note 1. The device mounted on  $1in^2$  FR4 board with 2 oz copper.

## P-Channel MOSFET

## 2KJ7118DFN

■ Electrical Characteristics ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$V_{DS}$	$I_D = -250\mu\text{A}$ , $V_{GS} = 0\text{V}$	-30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = -24\text{V}$ , $V_{GS} = 0\text{V}$			-1	$\mu\text{A}$
Gate-Body Leakage Current	$I_{GSS}$	$V_{DS} = 0\text{V}$ , $V_{GS} = \pm 20\text{V}$			$\pm 100$	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$ , $I_D = -250\mu\text{A}$	-1.0		-2.5	V
Static Drain-Source On-Resistance (Note 1)	$R_{DS(on)}$	$V_{GS} = -10\text{V}$ , $I_D = -12\text{A}$		8	12	m $\Omega$
		$V_{GS} = -4.5\text{V}$ , $I_D = -9\text{A}$		12	19	
Input Capacitance	$C_{iss}$	$V_{GS} = 0\text{V}$ , $V_{DS} = -15\text{V}$ , $f = 1\text{MHz}$		2690		pF
Output Capacitance	$C_{oss}$			371		
Reverse Transfer Capacitance	$C_{rss}$			293		
Turn-On Delay Time	$t_{d(on)}$	$V_{DS} = -15\text{V}$ , $R_L = 15\ \Omega$ $V_{GS} = -10\text{V}$ , $R_{GEN} = 3.3\ \Omega$		45.5		ns
Turn-On Rise Time	$t_r$			19.3		
Turn-Off Delay Time	$t_{d(off)}$			152		
Turn-Off Fall Time	$t_f$			40.8		
Total Gate Charge	$Q_g$	$V_{DS} = -15\text{V}$ , $I_D = -15\text{A}$ , $V_{GS} = -4.5\text{V}$		27.6		nC
Gate Source Charge	$Q_{gs}$			14.1		
Gate Drain Charge	$Q_{gd}$			16.3		
Diode Forward Voltage	$V_{SD}$	$I_{SD} = -1\text{A}$ , $V_{GS} = 0\text{V}$			-1	V

Note 1. Pulse Test: Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .

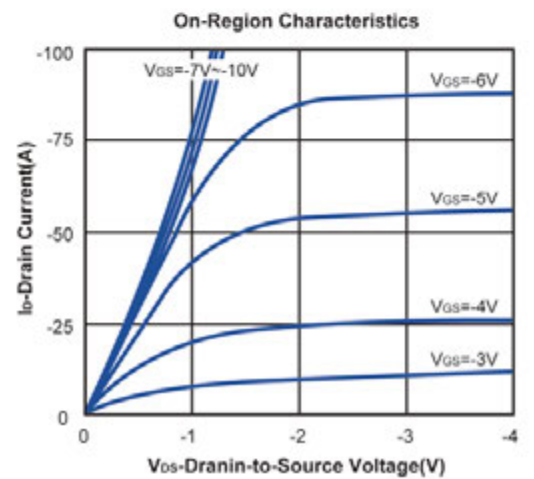
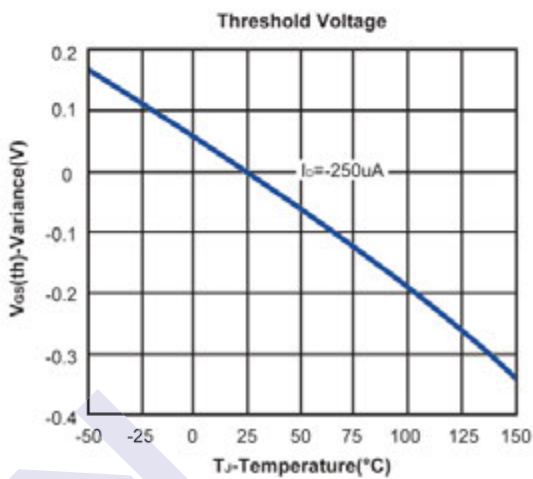
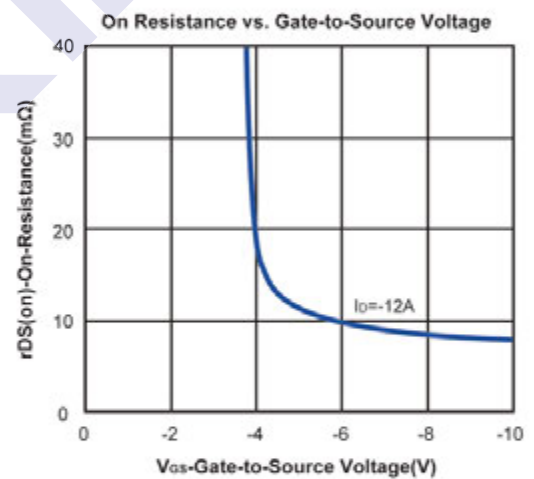
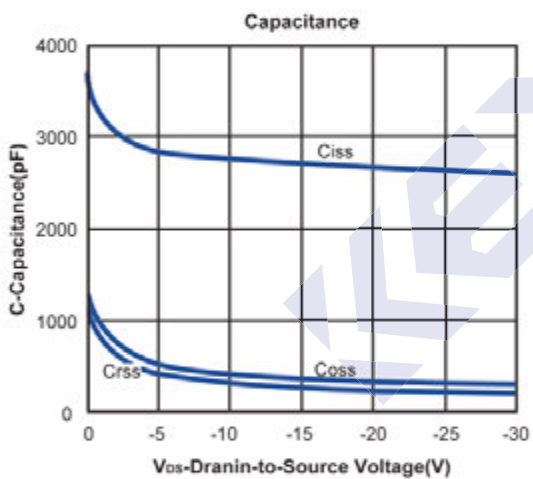
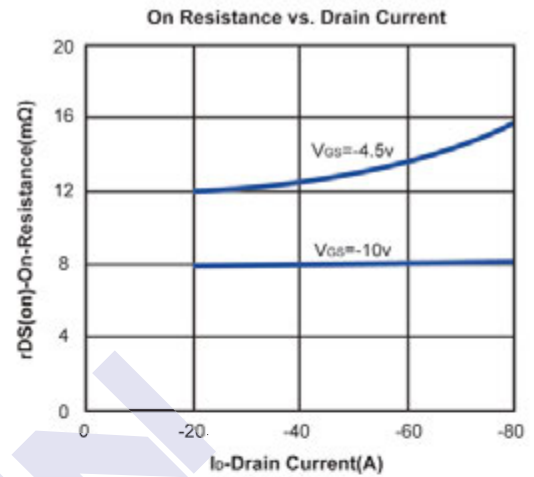
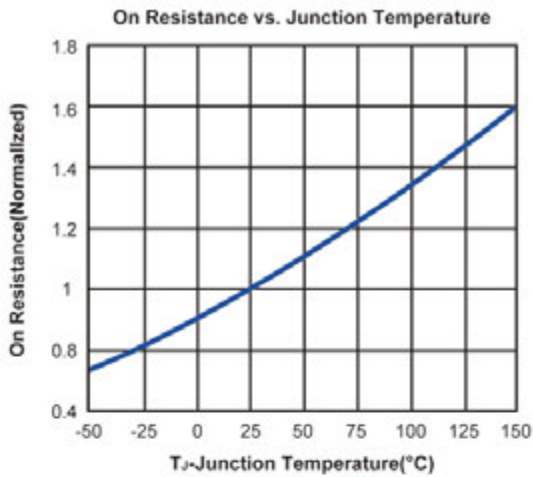
## ■ Marking

Marking	J7118 KC***
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## P-Channel MOSFET

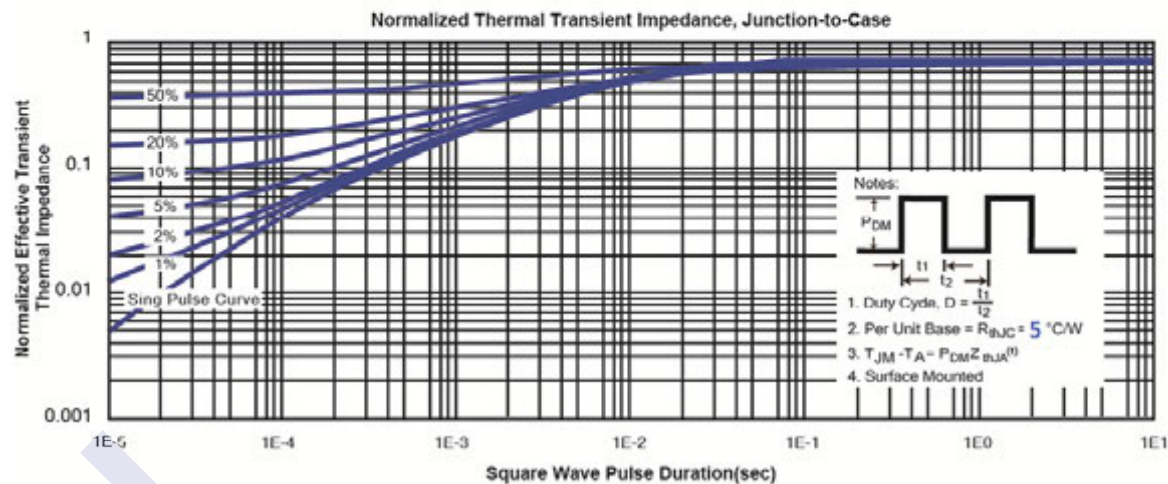
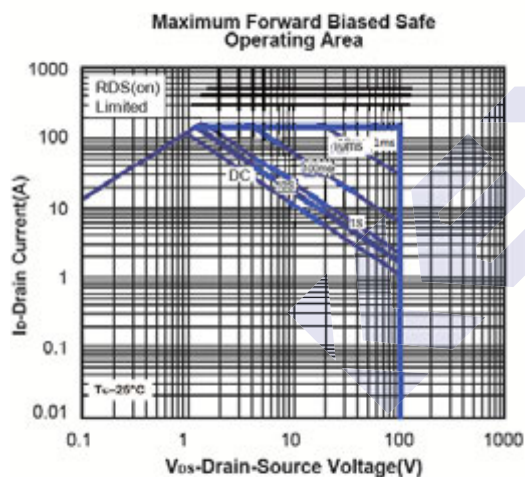
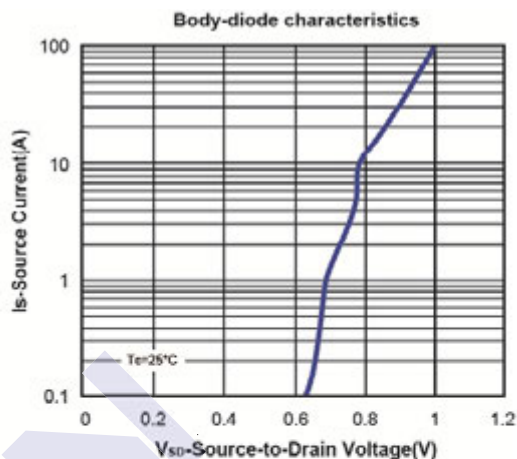
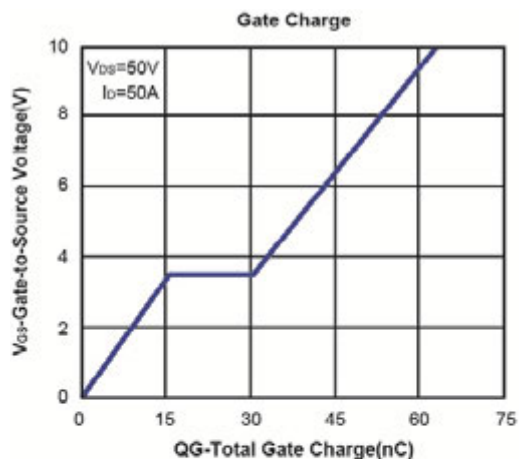
### 2KJ7118DFN

#### ■ Typical Characteristics



# P-Channel MOSFET

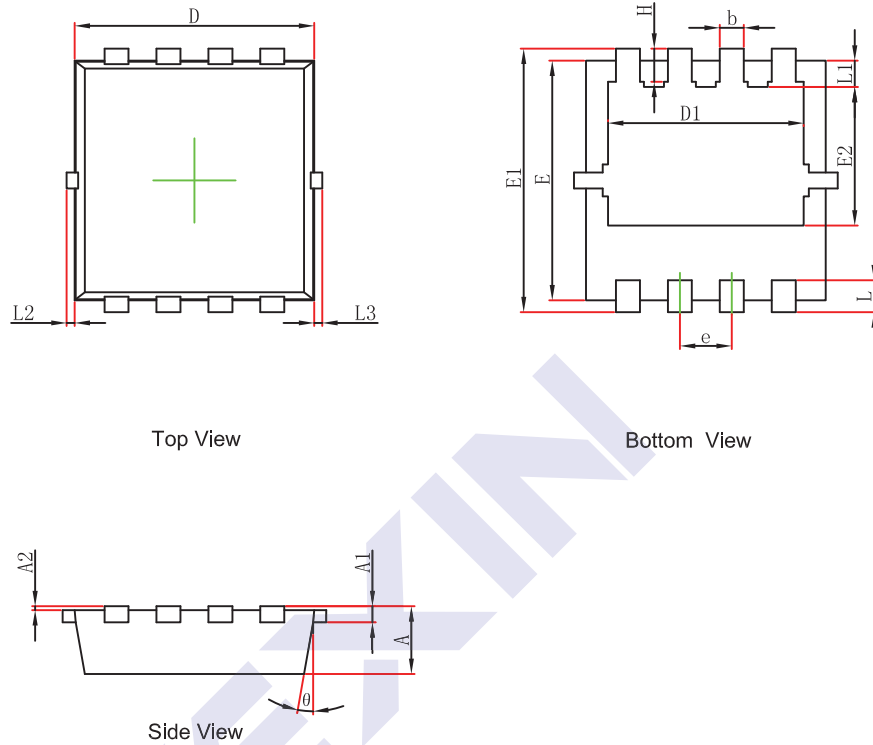
## 2KJ7118DFN



## P-Channel MOSFET

## 2KJ7118DFN

## ■ PDFN3.3x3.3-8 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.650	0.850	0.026	0.033
A1	0.152 REF.		0.006 REF.	
A2	0~0.05		0~0.002	
D	2.900	3.100	0.114	0.122
D1	2.300	2.600	0.091	0.102
E	2.900	3.100	0.114	0.122
E1	3.150	3.450	0.124	0.136
E2	1.535	1.935	0.060	0.076
b	0.200	0.400	0.008	0.016
e	0.550	0.750	0.022	0.030
L	0.300	0.500	0.012	0.020
L1	0.180	0.480	0.007	0.019
L2	0~0.100		0~0.004	
L3	0~0.100		0~0.004	
H	0.315	0.515	0.012	0.020
$\theta$	9°	13°	9°	13°