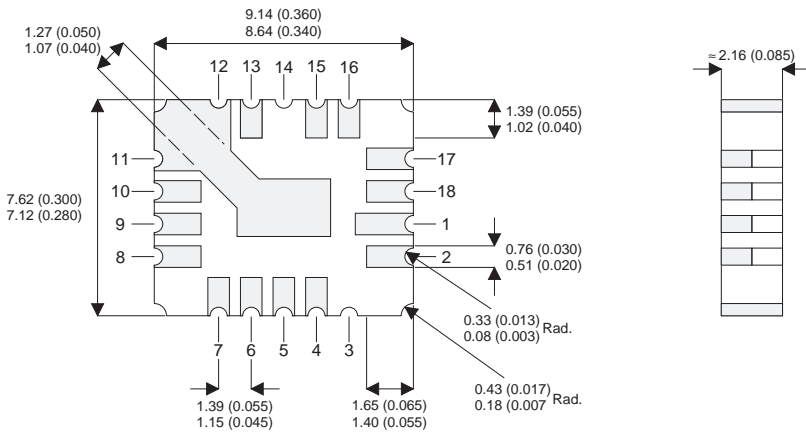


**MECHANICAL DATA**

Dimensions in mm (inches)



**N-CHANNEL  
POWER MOSFET**

$V_{DSS} = 100V$   
 $I_D = 7.4A$   
 $R_{DS(ON)} = 0.18\Omega$

**LCC4 CERAMIC SURFACE MOUNT PACKAGE**

**Underside View**

- Pads 6, 7, 8, 9, 10, 11, 12, 13. **Source**
- Pads 4,5 **Gate**
- Pads 1,2,15,16,17,18 **Drain**
- Pads 3,14 **Not Connected**

**FEATURES**

- Hermetically sealed ceramic surface mount package
- Small footprint
- Simple drive requirements

**ABSOLUTE MAXIMUM RATINGS** ( $T_{case} = 25^\circ C$  unless otherwise stated)

$V_{DS}$	Drain-Source Voltage	100V
$V_{DGR}$	Drain-Gate Voltage ( $V_{GS} = 1.0m\Omega$ )	100V
$V_{GS}$	Gate-Source Voltage	$\pm 20V$
$I_D$	Drain Current Continuous	7.4A
$I_{DM}$	Drain Current Pulsed	30A
$P_D$	Total Device Dissipation @ $T_C = 25^\circ C$	22W
	Derate above $25^\circ C$	0.17°C/W
$T_J, T_{STG}$	Operating and Storage Junction Temperature Range	-55 to +150°C

**THERMAL CHARACTERISTICS**

$R_{\theta JC}$	Thermal Resistance Junction to Case	5.0°CW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	175°CW
$T_L$	Maximum Lead Temperature 1.5mm from Case for 10 secs.	300°C

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
<b>OFF CHARACTERISTICS</b>					
$V_{(BR)DSS}$ Drain–Source Breakdown Voltage	$V_{GS} = 0$ $I_D = 0.25mA$	100			V
$I_{DSS}$ Zero Gate Voltage Drain Current	$V_{DS} = \text{Rated } V_{DS}$ $V_{GS} = 0$			250	$\mu A$
	$V_{DS} = 80V$ $V_{GS} = 0A$ $T_J = 125^\circ C$			1000	
$I_{GSSF}$ Gate–Body Leakage, Forward	$V_{DS} = 0$ $V_{GS} = 20V$			100	nA
$I_{GSSR}$ Gate–Body Leakage, Reverse	$V_{DS} = 0$ $V_{GS} = -20V$			-100	
<b>ON CHARACTERISTICS</b>					
$V_{GS(th)}$ Gate Threshold Voltage	$V_{DS} = V_{GS}$ $I_D = 0.5mA$	2		4	V
$R_{DS(on)}$ Static Drain–Source On–Resistance	$V_{GS} = 10V$ $I_D = 4.7A$ $T_A = 125^\circ C$			0.18	$\Omega$
				0.35	
$V_{DS(on)}$ Drain–Source On–Voltage	$V_{GS} = 15V$ $I_D = 7.4A$			1.56	V
$g_{fS}$ Forward Transconductance	$V_{GS} = 15V$ $I_D = 4.7A$	3		9	mhos
<b>DYNAMIC CHARACTERISTICS</b>					
$C_{iss}$ Input Capacitance	$V_{DS} = 25V$ $V_{GS} = 0$ $f = 1.0MHz$	350		900	$\mu F$
$C_{oss}$ Output capacitance		150		500	
$C_{rss}$ Reverse Transfer Capacitance		50		150	