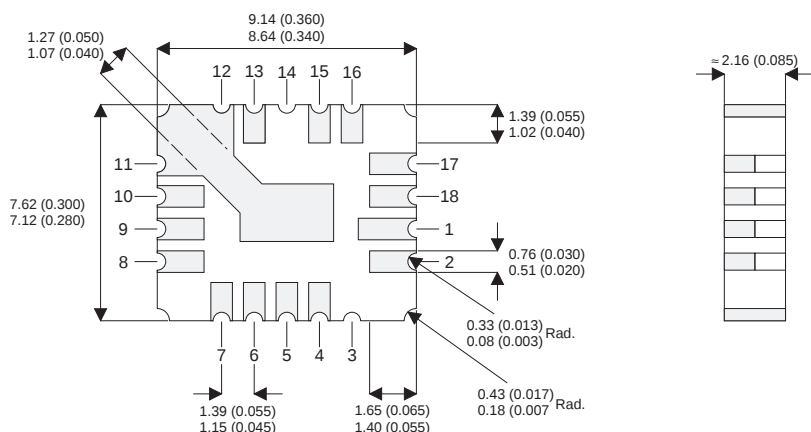


MECHANICAL DATA

Dimensions in mm (inches)



N-CHANNEL POWER MOSFET

$$V_{DS} = 100V$$

$$I_D = 7.4A$$

$$R_{DS(ON)} = 0.18\Omega$$

FEATURES

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

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

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 $25^{\circ}C$	$0.17^{\circ}C/W$
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 to $+150^{\circ}C$

THERMAL CHARACTERISTICS

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

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS							
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} = Rated V _{DS}	V _{GS} = 0			250	μA
		V _{DS} = 80V	V _{GS} = 0A T _J = 125°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	
ON CHARACTERISTICS							
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			0.18	Ω
			T _A = 125°C			0.35	
V _{DS(on)}	Drain–Source On–Voltage	V _{GS} = 15V	I _D = 7.4A			1.56	V
gf _S	Forward Transconductance	V _{GS} = 15V	I _D = 4.7A	3		9	mhos
DYNAMIC CHARACTERISTICS							
C _{iSS}	Input Capacitance	V _{DS} = 25V V _{GS} = 0 f = 1.0MHz		350		900	pF
C _{oSS}	Output capacitance			150		500	
C _{rSS}	Reverse Transfer Capacitance			50		150	