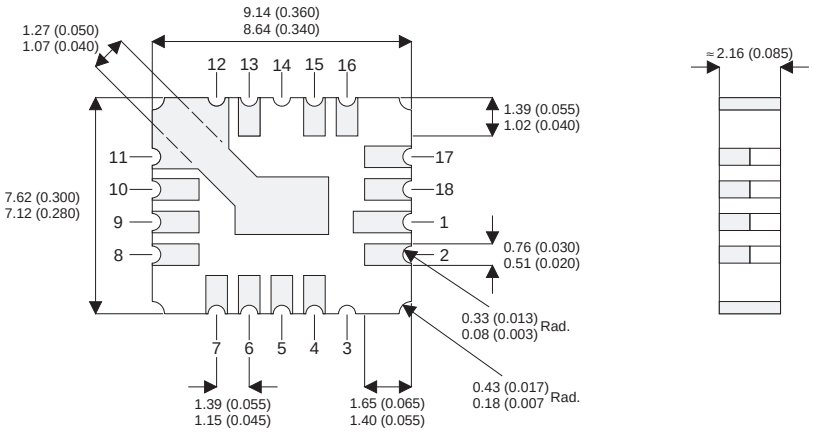
2N6796LCC4

MECHANICAL DATA
Dimensions in mm (inches)



N-CHANNEL POWER MOSFET

V_{DSS} = 100V

I_D = 7.4A

$R_{DS(ON)}$ = 0.18Ω

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°C unless otherwise stated)

V_{DS}	Drain–Source Voltage		100V
V_{DGR}	Drain–Gate Voltage	(V_{GS} = 1.0mΩ)	100V
V_{GS}	Gate–Source Voltage		±20V
I_D	Drain Current Continuous		7.4A
I_{DM}	Drain Current Pulsed		30A
P_D	Total Device Dissipation @ T_C = 25°C		22W
	Derate above 25°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
$R_{\theta JC}$	Thermal Resistance Junction to Ambient	175°CW
T_L	Maximum Lead Temperature 1.5mm from Case for 10 secs.	300°C

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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			1000	
			T_J = 125°C				
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		350		900	pF
C_{oss}	Output capacitance	V_{GS} = 0		150		500	
C_{rss}	Reverse Transfer Capacitance	f = 1.0MHz		50		150	