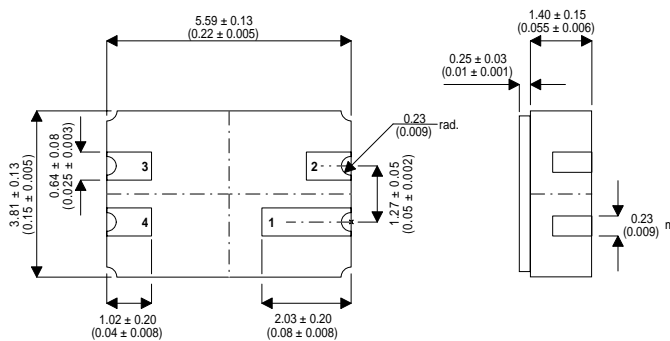


P-CHANNEL ENHANCEMENT MODE IN A CERAMIC SURFACE MOUNT PACKAGE FOR HIGH REL APPLICATIONS

MECHANICAL DATA
Dimensions in mm (inches)



LCC3 PACKAGE
Underside View

PAD 1 - Drain PAD 3 - Source
PAD 2 - N/C PAD 4 - Gate

FEATURES

- $V_{DSS} = 45V$
- $I_D = 0.18A$
- $r_{dson} = 14 \text{ ohms}$
- Hermetic Surface Mount Package
- Screening Option Available

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ C$ unless otherwise stated)

V_{DS}	Drain – Source Voltage		45V
V_{GS}	Gate – Source Voltage		±30V
I_D	Continuous Drain Current	@ $T_A = 25^\circ C$	0.15A
		@ $T_A = 100^\circ C$	0.095A
I_{DM}	Pulsed Drain Current		0.69A
P_D	Power Dissipation	@ $T_A = 25^\circ C$	0.83W
		@ $T_A = 100^\circ C$	0.32W
T_{STG}, T_J	Maximum Junction and Storage Temperature Range		150°C

ELECTRICAL RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

Characteristic		Test Conditions		Min.	Typ.	Max.	Unit
STATIC CHARACTERISTICS							
$V_{(BR)DSS}$	Drain – Source Breakdown Voltage	$V_{GS} = 0V$	$I_D = 100\mu A$	45	60		V
$V_{GS(TH)}$	Gate Threshold Voltage	$V_{DS} = V_{GS}$	$I_D = 1mA$	1	2.7	3.5	
I_{GSS}	Gate – Body Leakage	$V_{GS} = \pm 15V$	$V_{DS} = 0V$		± 1	± 20	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS} = 36V$	$V_{GS} = 0V$ $T_J = 125^\circ\text{C}$			0.5 2000	μA
$I_{D(ON)}$	On State Drain Current ¹	$V_{DS} = 10V$	$V_{GS} = 10V$	0.2			A
$R_{DS(ON)}$	Drain – Source On-State Resistance ¹	$V_{GS} = 10V$	$I_D = 0.2A$ $T_J = 125^\circ\text{C}$			14 28	Ω
g_{fs}	Forward Transconductance ¹	$V_{DS} = -10V$	$I_D = 0.2A$	100			mS
g_{os}	Common Source Output Conductance	$V_{DS} = -7.5V$	$I_D = -0.1A$		600		μS
C_{iss}	Input capacitance	$V_{GS} = 0V$			25	60	pF
C_{oss}	Output capacitance	$V_{DS} = 25V$			15	25	
C_{rss}	Reverse transfer capacitance	$f = 1MHz$			4	8	
t_{on}	Turn-on Time	$V_{DD} = 25V$ $I_D = 200mA$	$R_L = 120\Omega$ $R_G = 25\Omega$		16		ns
t_{off}	Turn-off Time	$V_{GEN} = 10V$	(Switching time is essentially independent of operating temp.)		15		

NOTES:

1) Pulse Test: Pulse Width = $300\mu s$, Duty Cycle $\leq 2\%$