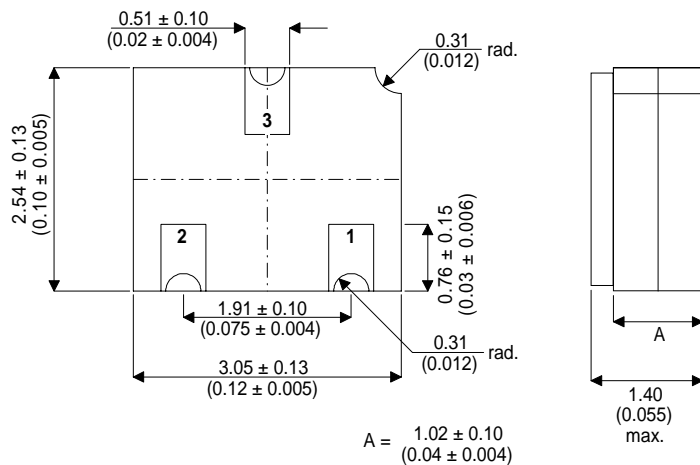


MECHANICAL DATA

Dimensions in mm (inches)



**SOT23 CERAMIC
(LCC1 PACKAGE)**

Underside View

PAD 1 – Gate PAD 2 – Source PAD 3 – Drain

**N-CHANNEL
ENHANCEMENT MODE
MOS TRANSISTOR**

FEATURES

- $V_{(BR)DSS} = 60V$
- $R_{DS(ON)} = 5\Omega$
- $I_D = 200mA$
- **Hermetic Ceramic Surface Mount package**
- **Screening Options Available**

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

V_{DS}	Drain – Source Voltage	60V
V_{GS}	Gate – Source Voltage	$\pm 40V$
I_D	Drain Current @ $T_{CASE} = 25^\circ C$	200mA
I_{DM}	Pulsed Drain Current *	500mA
P_D	Power Dissipation @ $T_{CASE} = 25^\circ C$	300mW
T_j	Operating Junction Temperature Range	-55 to $150^\circ C$
T_{stg}	Storage Temperature Range	-55 to $150^\circ C$

* Pulse width limited by maximum junction temperature.

ELECTRICAL CHARACTERISTICS ($T_{CASE} = 25^{\circ}C$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit	
STATIC CHARACTERISTICS						
$V_{(BR)DSS}$	Gate – Source Breakdown Voltage	$V_{GS} = 0V$	$I_D = 10\mu A$	60	70	V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS} = V_{GS}$	$I_D = 0.25mA$	0.8	3.0	
I_{GSS}	Gate – Body Leakage Current	$V_{GS} = \pm 20V$ $V_{DS} = 0V$			-10	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS} = 60V$	$V_{GS} = 0V$		1	μA
			$T_{CASE} = 125^{\circ}C$		1	mA
$I_{D(on)*}$	On–State Drain Current	$V_{DS} \geq 2V_{DS(on)}$	$V_{GS} = 4.5V$	75		mA
$R_{DS(on)*}$	Drain – Source On Resistance	$V_{GS} = 10V$	$I_D = 0.5A$	$T_{CASE} = 125^{\circ}C$	5	Ω
					9	
$V_{DS(on)*}$	Drain – Source On Voltage	$V_{GS} = 4.5V$	$I_D = 75mA$		0.4	V
			$I_D = 0.5A$		2.5	
g_{FS*}	Forward Transconductance	$V_{GS} = 10V$	$I_D = 0.5A$	100		ms
DYNAMIC CHARACTERISTICS						
C_{iss}	Input Capacitance	$V_{DS} = 25V$			60	pF
C_{oss}	Output Capacitance	$V_{GS} = 0V$			25	
C_{rss}	Reverse Transfer Capacitance	$f = 1MHz$			5	
SWITCHING CHARACTERISTICS						
t_{ON}	Turn–On Time	$V_{DD} = 30V$	$V_{GEN} = 10V$		10	ns
t_{OFF}	Turn–Off Time	$R_L = 150\Omega$	$R_G = 25\Omega$		10	
		$I_D = 0.2A$				

* Pulse Test: $PW = 80 \mu s$, $\delta \leq 1\%$

Parameter	Min.	Typ.	Max.	Unit
$R_{\theta JA}$			416	$^{\circ}C/W$