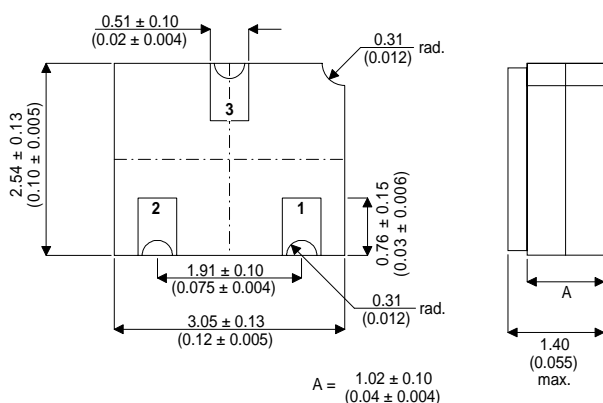


## SMALL SIGNAL N-CHANNEL J-FET IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

**MECHANICAL DATA**  
Dimensions in mm (inches)



**SOT23 CERAMIC  
(LCC1 PACKAGE)**

**Underside View**

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

### FEATURES

- HERMETIC CERAMIC SURFACE MOUNT PACKAGE (SOT23 COMPATIBLE)
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS

### APPLICATIONS:

Hermetically sealed surface mount version of the popular 2N4392 for high reliability / space applications requiring small size and low weight devices.

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

$V_{DS}$	Drain – Source Voltage	40V
$V_{DG}$	Drain – Gate Voltage	40V
$V_{GS}$	Gate – Source Voltage	40V
$I_G$	Forward Gate Current	50mA
$P_D$	Power Dissipation @ $T_A = 25^{\circ}\text{C}$	500mW
	Derate above $25^{\circ}\text{C}$	2.85mW / $^{\circ}\text{C}$
$T_J, T_{STG}$	Operating Junction and Storage Temperature Range	$-65$ to $+175^{\circ}\text{C}$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit	
$V_{(BR)GSS}$	Gate – Source Breakdown Voltage	$V_{DS} = 0$	$I_G = 1\mu\text{A}$	40		
$V_{GS}$	Gate – Source Voltage	$V_{DS} = 20\text{V}$	$I_D = 1\text{nA}$	-2	-5	V
$V_{GS(f)}$	Gate – Source Forward Voltage	$V_{DS} = 0$	$I_G = 1\text{mA}$		1	
$I_{GSS}$	Gate Reverse Current	$V_{DS} = 0$	$V_{GS} = 20\text{V}$		0.1	nA
$I_{D(off)}$	Drain Cut-off Current	$V_{DS} = 20\text{V}$	$V_{GS} = -7\text{V}$		0.1	
$I_{DSS}^*$	Zero Gate Voltage Drain Current	$V_{DS} = 20\text{V}$	$V_{GS} = 0$	25	75	mA
$V_{DS(on)}$	Drain – Source On Voltage	$V_{GS} = 0$	$I_D = 6\text{mA}$		0.4	V
$R_{DS(on)}$	Drain – Source On Resistance	$V_{GS} = 0$	$I_D = 1\text{mA}$		60	$\Omega$
$C_{ISS}$	Input Capacitance	$V_{DS} = 20\text{V}$ $f = 1\text{MHz}$	$V_{GS} = 0$		14	pF
$C_{RSS}$	Reverse Transfer Capacitance	$V_{DS} = 0$ $f = 1\text{MHz}$	$V_{GS} = -7\text{V}$		3.5	
$R_{DS(on)}$	Static Drain – Source On Resistance	$V_{GS} = 0$	$I_D = 1\text{mA}$		60	$\Omega$
$t_r$	Rise Time	$I_{D(on)} = 6\text{mA}$			5	ns
$t_f$	Fall Time	$V_{GS(off)} = 7\text{V}$			20	
$t_{on}$	Turn-On Time	$I_{D(on)} = 6\text{mA}$			15	
$t_{off}$	Turn-Off Time	$V_{GS(off)} = 7\text{V}$			35	

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