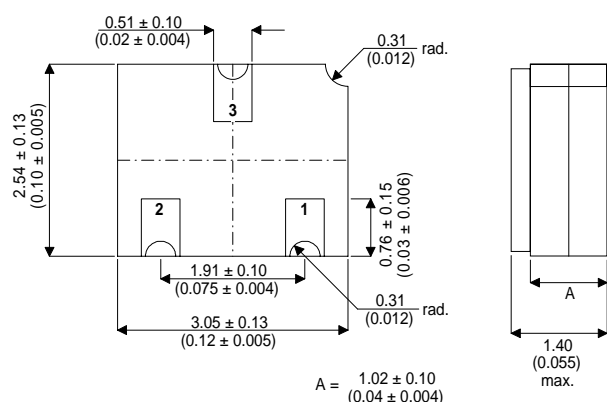


SMALL SIGNAL N-CHANNEL J-FET IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

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°C	2.85mW / $^{\circ}\text{C}$
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-65 to +175 $^{\circ}\text{C}$

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
V_{GS} Gate – Source Voltage	$V_{DS} = 20\text{V}$ $I_D = 1\text{nA}$	–2		–5	
$V_{GS(f)}$ 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	Ω
C_{ISS} Input Capacitance	$V_{DS} = 20\text{V}$ $V_{GS} = 0$ $f = 1\text{MHz}$			14	pF
C_{RSS} Reverse Transfer Capacitance#	$V_{DS} = 0$ $V_{GS} = -7\text{V}$ $f = 1\text{MHz}$			3.5	
$R_{DS(on)}$ Static Drain – Source On Resistance	$V_{GS} = 0$ $I_D = 1\text{mA}$			60	Ω
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	