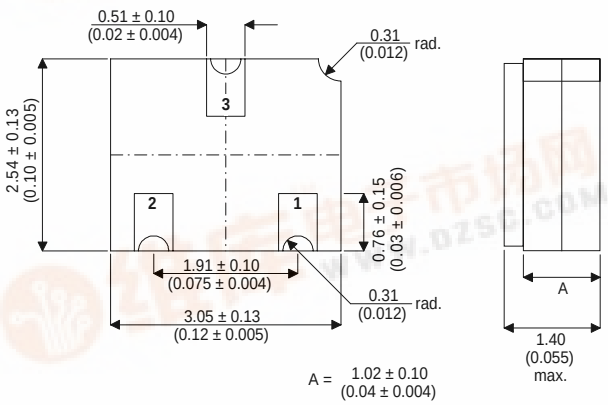
SEME LAB

2N4392CSM

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°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°C	500mW
	Derate above 25°C	2.85mW / °C
T_J / T_{STG}	Operating Junction and Storage Temperature Range	–65 to +175°C

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ELECTRICAL CHARACTERISTICS (T_{amb} = 25°C unless otherwise stated)

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