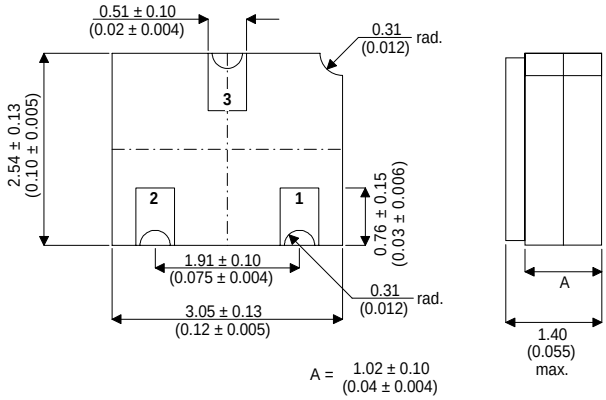
FMMT92CSM

MECHANICAL DATA
Dimensions in mm (inches)



SOT23 CERAMIC
(LCC1 PACKAGE)

Underside View

PAD 1 – Base PAD 2 – Emitter PAD 3 – Collector

GENERAL PURPOSE PNP TRANSISTOR IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE

FEATURES

- **GENERAL PURPOSE PNP TRANSISTOR**
- **HERMETIC CERAMIC SURFACE MOUNT PACKAGE**
- **CECC SCREENING OPTIONS**

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{CBO}	Collector – Base Voltage	-300V
V_{CEO}	Collector – Emitter Voltage	-300V
V_{EBO}	Emitter – Base Voltage	-5V
I_C	Continuous Collector Current	-500mA
P_{tot}	Power Dissipation @ T_{amb} = 25°C	680mW
	@ T_{case} = 25°C	1.8W
$T_j T_{stg}$	Operating and Storage Temperature	–55 to 175°C

THERMAL CHARACTERISTICS

	Parameter	Max.	Unit
$R_{th(j-amb)}$	Thermal Resistance Junction to Ambient	350	°C/W
$R_{th(j-case)}$	Thermal Resistance Junction to Case	80	°C/W

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise stated)

	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
$V_{(BR)CBO}$	Collector – Base Breakdown Voltage	I_C = -100µA	I_E = 0	-300			V
$V_{(BR)CEO}$	Collector - Emitter Breakdown Voltage	I_C = -1mA*	I_B = 0	-300			V
$V_{(BR)EBO}$	Emitter – Base Breakdown Voltage	I_E = -10µA	I_C = 0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = -200V	I_E = 0			-0.25	µA
I_{EBO}	Emitter Cut-off Current	V_{EB} = -3V	I_E = 0			-0.1	
$V_{CE(sat)}$	Collector – Emitter Saturation Voltage	I_C = -20mA	I_B = -2mA			-0.5	V
$V_{BE(sat)}$	Emitter Saturation Voltage	I_C = -20mA	I_B = -2mA			-0.9	
h_{FE}	Static Forward Current Transfer Ratio	I_C = -1mA	V_{CE} = -10V*	25			—
		I_C = -10mA	V_{CE} = -10V*	40			
		I_C = -30mA	V_{CE} = -10V*	25			
f_T	Transition Frequency	V_{CE} = -20V f = 20MHz	I_C = -10mA	50			MHz
C_{obo}	Output Capacitance	V_{CB} = -20V	f = 1MHz			6	pF

* Pulse Test: Pulse Width = 200µs, Duty Cycle ≤ 2%.