

Thin Film Integrated Fuse: Quad Fuse Array

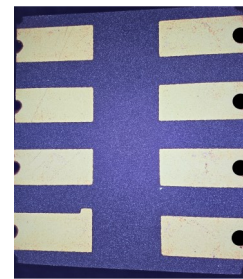
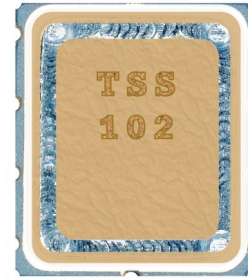
TSS102 / TSS1339

Product Brief

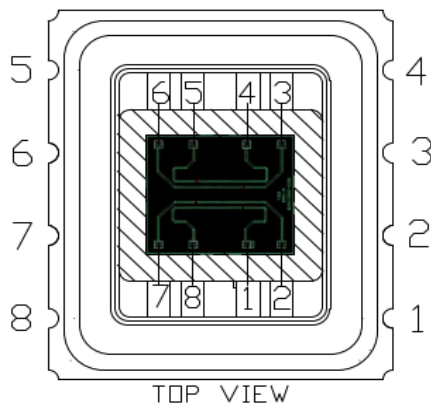
Quad Fuse Product Family

FEATURES

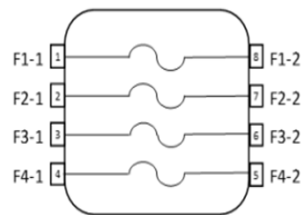
- Thin film precision metal resistors
 - Four independent fusible links
- Surface mount device (SMD)
- Seam-welded metal lid
 - Clearance between fuse die and lid allows dispersion of fusible link material
- Silicon oxide layer protects die surface, with opening over each fusible link
- Standard silicon die attach in package cavity
- Wire-bonded connections from die to package



Internal Wiring Diagram



Quad Fuse Schematic



APPLICATIONS

- Secondary circuit protection
- Circuit isolation
- One-shot devices
- Industrial electronics
- Telecommunication
- Medical equipment
- Hi-Rel circuits requiring stable fusing characteristics

PRODUCT DESCRIPTION

The quad fuse array is composed of precision thin film metal resistors that act as fusible links. The integrated fuse array is built on a semiconductor wafer process and is hermetically sealed in a low-profile ceramic leadless chip carrier (CLCC).

TSS102 and TSS1339 are designed for high-reliability, one-time fusing applications where a precision metal fuse is required.

Thin Film Integrated Fuse: Quad Fuse Array

TSS102 / TSS1339

Product Brief

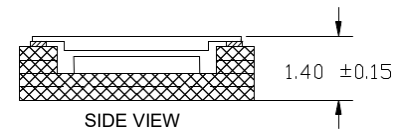
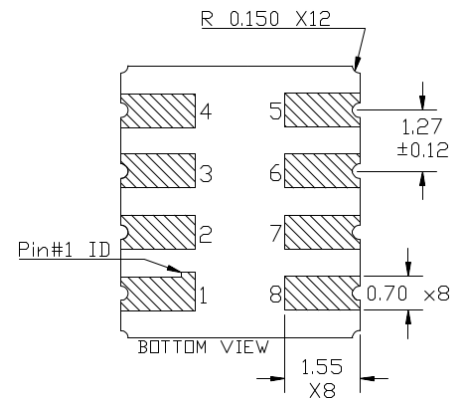
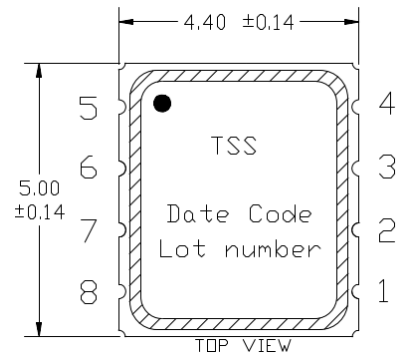
Quad Fuse Product Family

PRODUCT RELIABILITY TESTING PERFORMED

- Gross leak check performed on all parts
- Electrical resistance measured on all fuses
- Wafer lot sample screening includes:
 - Hermeticity: Fine Leak testing
 - Solderability
 - Wire bond pull test
 - Langlie characterization

ASSEMBLY

- Compatible with standard SMD reflow
- Nickel/gold-plated solder terminals
- Handle in ESD-safe environment



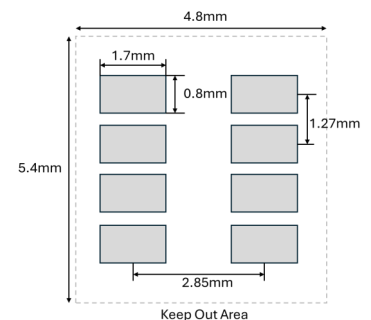
Dimensions in mm.

PART NUMBER	GRADE	COUNTRY OF ORIGIN
TSS102	Commercial	U.S.A.
TSS1339	Commercial	Various

ELECTRICAL & STORAGE CHARACTERISTICS

Parameter	Condition	Min	Typical	Max	Units
Resistance	25°C	-	7.5	-	Ohms
Characterized Fusing Voltage	25°C	-	4.5	-	V
Rated Current	25°C	-	0.6	-	A
Operating Temperature	-	-35	-	+60	°C
Storage Temperature	-	-55	-	+125	°C

PCB Land Pattern



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