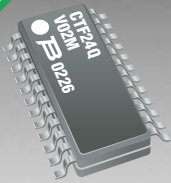


*ROHS COMPLIANT
VERSIONS
AVAILABLE



BOURNS®

Features

- Lead free versions available
- RoHS compliant (lead free version)*
- 18 RC terminators tied to a common node
- Stable thin-film-on-silicon technology
- Ultra-miniature packages to JEDEC standards

Applications

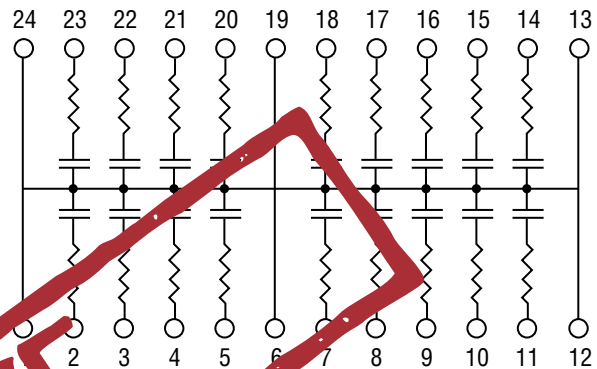
- High-speed bus termination
- Low power consumption
- Ideal for space-constrained applications

Thin Film on Silicon 2CTF AC Terminator x18

General Information

The AC Terminator is used to provide termination for clock and data lines where transmission line effects would otherwise cause wave reflections or signal ringing. These Silicon-based, Tantalum-Nitride resistors and capacitors feature excellent stability, temperature coefficients and tracking performance. This product series conforms to JEDEC standards.

Package Schematic



Electrical & Environmental Characteristics

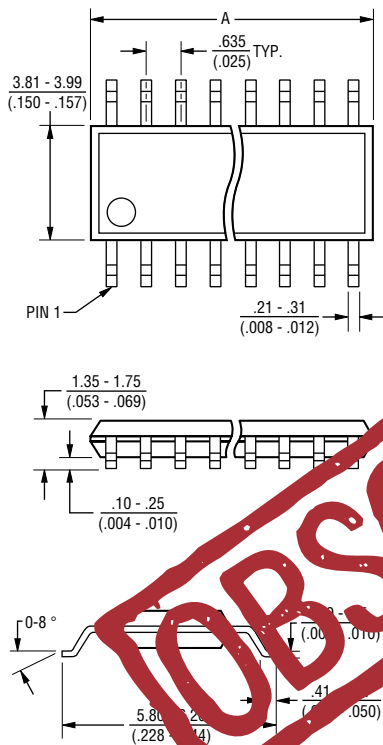
Electrical Characteristics	Symbol	Minimum	Nominal	Maximum	Unit
Resistance Range		33		190	Ω
Resistor Tolerance			$\pm 10\%$		Ω
Power Rating per Resistor @ 70 °C				0.1	Watt
Capacitor Range	C	33		180	pF
Capacitor Tolerance			$\pm 20\%$		pF
Capacitor Breakdown Voltage				200	V
Operating Voltage				50	V
Environmental Characteristics					
ESD		2 K			V
Operating Temperature	T_J	-55		+125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-65		+150	$^{\circ}\text{C}$
Power Rating per Package @ 70 °C				1.0	Watt

Thin Film on Silicon 2CTF AC Terminator x18

BOURNS®

Mechanical Characteristics

QSOP Package Dimensions

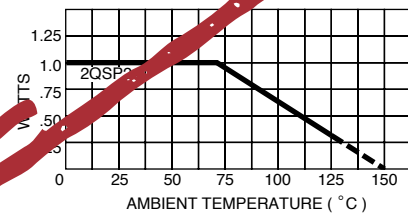


Model	A
2QSP24	8.56 - 8.74 (.337 - .344)

Governing dimensions are in mm. Dimensions in parentheses are in inches and are approximate.

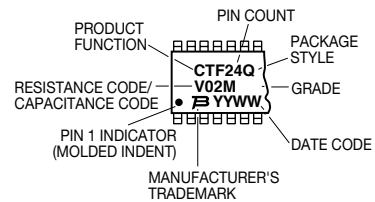
JEDEC Reference Number MO-187.

QSOP Package Power Temperature Derating Curve



Typical Part Marking

Represents total content. Layout may vary.



Standard RC Values

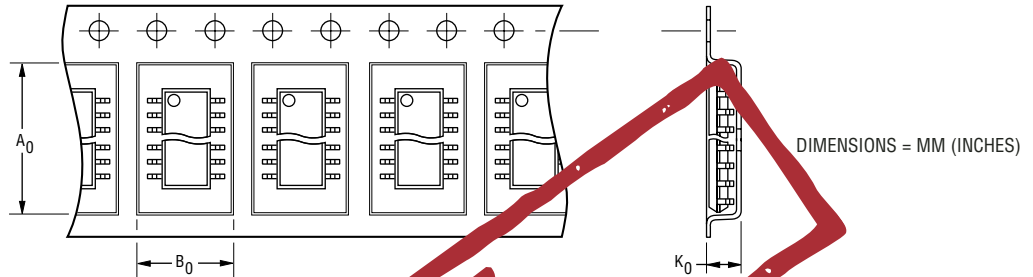
Value Code	R Value (ohms)	C Value (pF)	Cap. BV (typ.)	Part Number (Tape & Reel)	Part Number (Tubes)
V01	33	47	130	2CTF-V01M-Q24R	2CTF-V01M-Q24T
V02	47	47	130	2CTF-V02M-Q24R	2CTF-V02M-Q24T
V03	47	33	190	2CTF-V03M-Q24R	2CTF-V03M-Q24T
V04	50	180	35	2CTF-V04M-Q24R	2CTF-V04M-Q24T
V05	75	50	120	2CTF-V05M-Q24R	2CTF-V05M-Q24T
V06	100	100	63	2CTF-V06M-Q24R	2CTF-V06M-Q24T

Thin Film on Silicon 2CTF AC Terminator x18

BOURNS®

Dispensing

For large quantities, the product will be dispensed in Tape and Reel (see diagram below).



Package	A ₀	B ₀	K ₀	Lead Width	Pitch	No. of Pieces per 13 reel	No. of Pieces per tube
QSOP 24 Pin	6.5 (0.256)	9.0 (0.354)	2.1 (0.083)	0.630 (0.025)	8 (0.315)	3,500	56

How To Order

2 C T F - V02 M Q 24 R

Product Class _____
Thin-Film-on-Silicon

Product Function _____
CTF = AC Terminator

Value Code _____
(Refer to Standard RC Value Table)

Standard Grade _____
R Tol. C Tol.
M = ±10 % ±20 %

Standard Package Style _____
Q = QSOP

Pin Count _____
Q = 24

Dispensing _____
R = Reel T = Tube

Terminations _____
LF = 100 % Sn (lead free)
Blank = Sn/Pb



Reliable Electronic Solutions

Asia-Pacific:
Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

Europe:
Tel: +41-41 768 5555 • Fax: +41-41 768 5510

The Americas:
Tel: +1-951 781-5500 • Fax: +1-951 781-5700

www.bourns.com