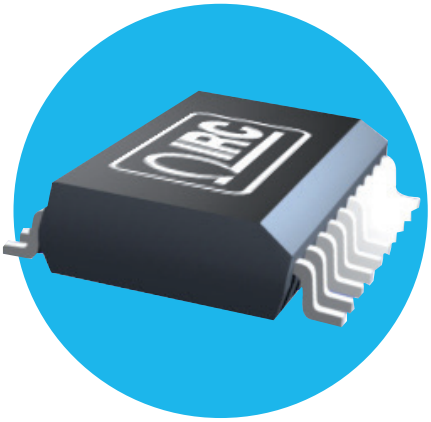
Resistors

TaNCap® AC Line Termination Network



AC Terminator Series

- **Improves signal quality**
- **Reduces power dissipation**
- **Highly integrated - replaces up to 36 discretes**
- **RoHS compliant and Sn/Pb terminations available**
- **Proven TaNCap® thin film technology in QSOP, SOIC, and TSSOP packages**

Today's high speed digital circuits demand top performance while maintaining low power dissipation. IRC's TaNCap® AC termination networks are designed to meet the needs of the digital circuit designer by blocking DC current flow into the terminating resistor during the steady-state portion of the digital signal while passing current into the tantalum nitride terminating resistor during the presence of signal edges and transients.

The SOIC, QSOP, and TSSOP packages offer a high level of integration in today's most popular surface mount configurations. One AC Termination network replaces up to 36 discrete components.

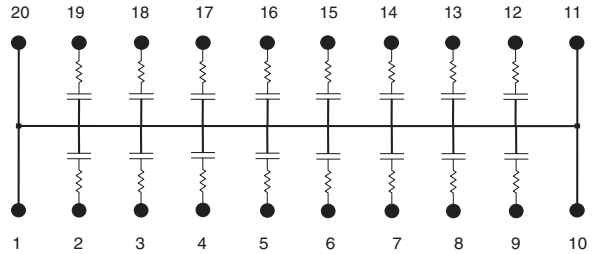
The TaNCap® series of resistor-capacitor networks are manufactured using IRC's military and space proven tantalum nitride thin film technology. For high reliability combined with superior performance, use IRC TaNCap® AC termination networks for your high speed, digital circuit applications.

Electrical Data

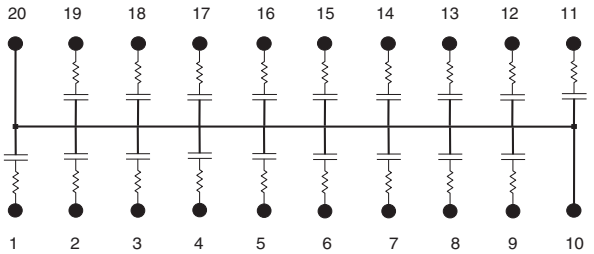
	Range	Tolerance (%)	Breakdown Voltage (volts)	TCR (ppm/°C)	Max. Power Dissipation (watts)	Operating Temp. Range (°C)
Resistors	10Ω to 100Ω	±10	N/A	±100	0.1 per resistor	-55 to +125
Capacitors	10pF to 200pF	±20	25	N/A	N/A	-55 to +125

Schematic Data

SCHEMATIC P



SCHEMATIC V



General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

Bi technologies IRC Welwyn

www.ttelectronicsresistors.com

Physical Data

Model	Body Type	# Pins	Reference IRC Datasheet
QS20x	QSOP	20	Surface Mount QSOP Termination Networks
SL20x	SOIC-W	20	Surface Mount SOIC Termination Networks
TS20x	TSSOP	20	Surface Mount TSSOP Termination Networks

Ordering Data

Sample Part Number GUS - QS20V - 330 - K - 470 - M

Family

Model
QS20P, QS20PLF = 16 circuit QSOP Package
QS20V, QS20VLF = 18 circuit QSOP Package
SL20P, SL20PLF = 16 circuit SOIC-W Package
SL20V, SL20VLF = 18 circuit SOIC-W Package
TS20P, TS20PLF = 16 circuit TSSOP Package
TS20V, TS20VLF = 18 circuit TSSOP Package

Note: LF suffix indicates 100% matte tin, Pb-free termination

Resistor Code
3 digit resistor code
Example: 330 = 33Ω, 101 = 100Ω

Resistor Tolerance
K = ±10%, M = ±20%

Capacitor Code
3 digit capacitance code
Example: 470 = 47pF, 101 = 100pF

Capacitor Tolerance
K = ±10%, M = ±20%

Packaging Available
Tubes, Tape & Reel

For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.