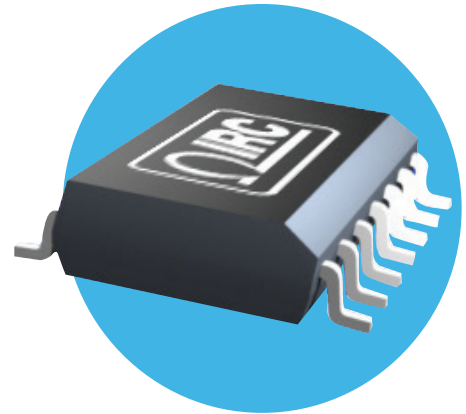


## TaNCap<sup>®</sup> T-Filter Network

### T-Filter Series

- Improves signal quality
- High frequency design available
- RoHS compliant and Sn/Pb terminations available
- Reduces unwanted signals while improving signal quality
- Proven TaNCap<sup>®</sup> technology available in QSOP, SOIC, and TSSOP packages



 All Pb-free parts comply with EU Directive 2011/65/EU (RoHS2)

IRC's TaNCap<sup>®</sup> T-filter networks are designed for the most demanding low pass filter applications. These TaNSil<sup>®</sup> technology thin film networks offer attenuation of high frequency signal components with minimal inductive effects. EMI/RFI reduction, improved signal quality and reduction of false triggers in digital circuits while minimizing insertion loss are characteristics of these silicon based filter networks.

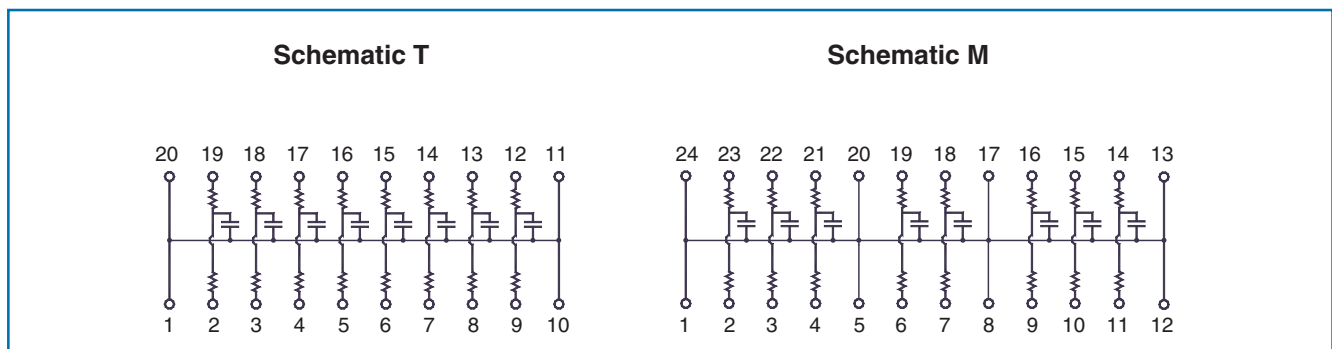
The SOIC, QSOP, and TSSOP packages offer a high level of integration in today's most popular surface mount configurations. Up to 24 discrete components are replaced by one T-filter network.

The TaNCap<sup>®</sup> 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<sup>®</sup> T-Filter Networks for your most demanding, high speed analog and digital designs.

## Electrical Data

	Range	Tolerance (%)	Breakdown Voltage (volts)	TCR (ppm/°C)	Max. Power Dissipation (watts)	Operating Temp. Range (°C)
<b>Resistors</b>	10Ω to 100Ω	±10	N/A	±100	0.1 per resistor	-55 to +125
<b>Capacitors</b>	10pF to 33pF	±20	200 to 100	N/A	N/A	
	34pF to 200pF	±10	100 to 25			

## Schematic Data



### 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.

**T-Filter Series**

## Physical Data

Model	Body Type	# Pins	Reference IRC Datasheet
QS20x	QSOP	20	Surface Mount QSOP Termination Networks
QS24x	QSOP	24	
SL20x	SOIC-W	20	Surface Mount SOIC Termination Networks
SL24x	SOIC-W	24	
TS20x	TSSOP	20	Surface Mount TSSOP Termination Networks
TS24x	TSSOP	24	

## Ordering Data

Sample Part Number ..... **GUS** - **QS20T** - **330** - **K** - **470** - **M**

Family ..... **GUS**

**Model** ..... **QS20T**  
 QS20T, QS20TLF = 20 pin QSOP T Filter  
 QS24M, QS24MLF = 24 pin QSOP High Frequency T Filter  
 SL20T, SL20TLF = 20 pin 0.300" SOIC T Filter  
 SL24M, SL24MLF = 24 pin 0.300" High Frequency T Filter  
 TS20T, TS20TLF = 20 pin TSSOP T Filter  
 TS24T, TS24TLF = 24 pin TSSOP High Frequency T Filter

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

**Resistor Code** ..... **330**  
 3-digit resistance code  
 Example: 330 = 33Ω, 101 = 100Ω

**Resistor Tolerance** ..... **K**  
 K = ±10%, M = ±20%

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

**Capacitor Tolerance** ..... **M**  
 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.

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