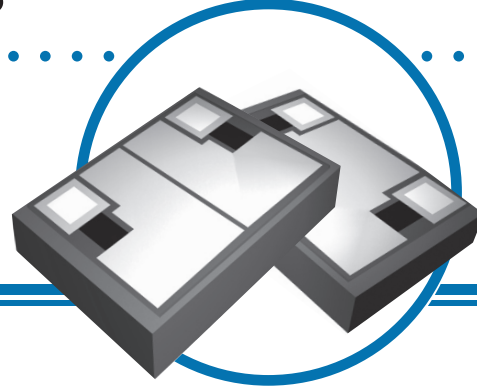


Wire Bondable Resistor/Capacitor Circuits

WBC-RC Series

- 3 types - AC terminator, Tapped and T-filter
- Integrated resistor and capacitor
- Proven IRC TaNSil® technology



Electrical Data

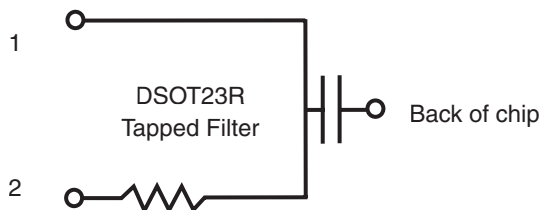
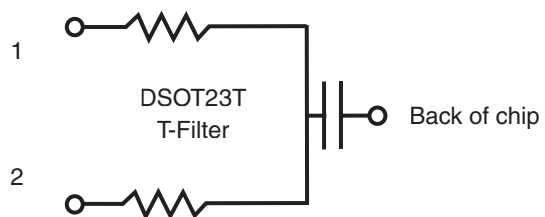
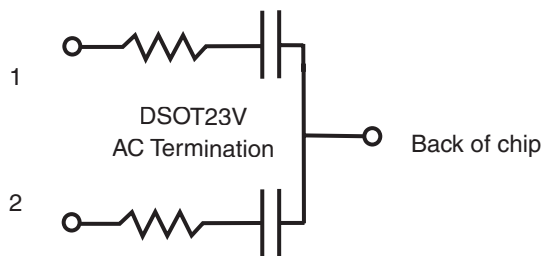
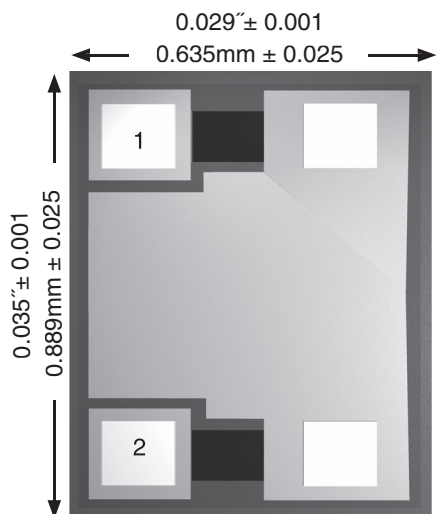
		AC Termination	T-Filter	Tapped Filter
Resistance Value		47Ω	100Ω	33Ω
Capacitance Value		47pF	80pF	47pF
Absolute Tolerance Resistor	Resistor	±10%		
	Capacitor	±20%		
Absolute Temperature Coefficient	Resistance	±150ppm/°C		
	Capacitance	±200ppm/°C		
Package Power Rating		250mW		
Resistor Element Power Rating		125mW		
Capacitance Breakdown Voltage		25V		
Operating Temperature		-55°C to +125°C		
Resistor Noise		<-25dB		
Substrate Material		Silicon		
Substrate Thickness		0.010" ±0.001 (0.254mm ±0.025)		
Bond Pad Metallization		Aluminum: 10KÅ minimum		
Backside		3000Å Gold		
Passivation		Silicon Dioxide or Silicon Nitride		

General Note

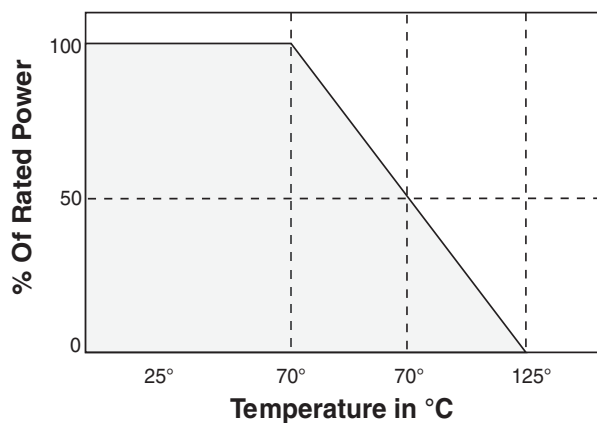
IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

Wire Bondable Resistor/Capacitor Circuits

Physical and Schematic Data



Power Derating Data



Wire Bondable Resistor/Capacitor Circuits

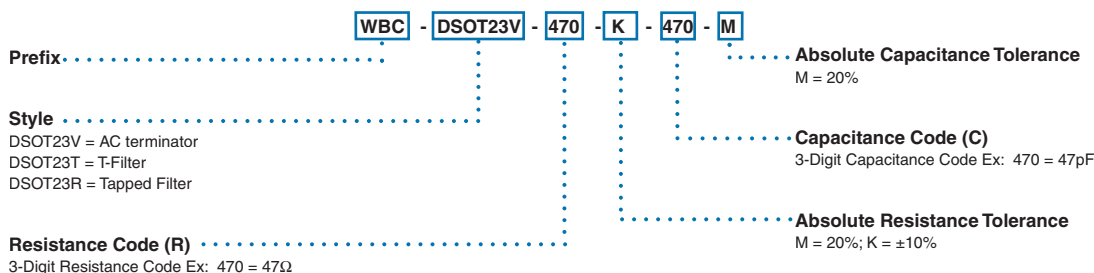
Environmental Data (Resistor)

Test	Method	Max ΔR	Typical ΔR
Thermal Shock	MIL-STD-202 Method 107 Test condition F	$\pm 0.1\%$	$\pm 0.02\%$
High Temperature Exposure	MIL-STD-883 Method 1008 150°C, 1000 hours	$\pm 0.1\%$	$\pm 0.05\%$
Low Temperature Storage	-55°C, 1000 hours	$\pm 0.03\%$	$\pm 0.01\%$
Life	MIL-STD-202 Method 108 70°C, 1000 hours	$\pm 0.5\%$	$\pm 0.01\%$
Life at Elevated Temperature	MIL-STD-202 Method 108 125°C, 1000 hours	$\pm 0.5\%$	$\pm 0.05\%$

Environmental Data (Capacitor)

Test	Method	Max ΔC
Insulation Resistance	MIL-STD-202 Method 107 Test condition F	10^9 min
Thermal Shock	MIL-STD-202 Method 107 Test condition F	$\pm 0.25\% + 0.25\text{pF max}$
Moisture Resistance	MIL-STD-202 Method 106	$\pm 1.0\% + 0.25\text{pF max}$
Short Time Overload	25°C, 5 seconds 1.5 X rated voltage	$\pm 0.25\% + 0.25\text{pF max}$
Life at Elevated Temperature	MIL-STD-202 Method 108 125°C, 1000 hours	$\pm 0.25\% + 0.25\text{pF max}$
High Temperature Exposure	100 hours @ 150°C ambient	$\pm 0.25\% + 0.25\text{pF max}$

Ordering Data



Packaging

Standard packaging is 2" x 2" chip tray. For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.