# TWODKS

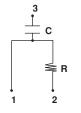
## VISHAY

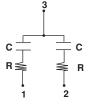
### Molded, SOT-23 Resistor/Capacitor Network

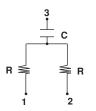


Vishay's R/C Network, packaged in the standard SOT-23, can be strategically placed on your PC board to do localized filtering. The R/C Network can be located at the point of emission before transients are carried through the design. The sophisticated process of integrating the Resistor and Capacitor on a single substrate provides you with higher performance and more consistent results over discrete components. A real estate savings will also be gained. Applications include EMI/RFI suppression and AC termination. These networks, in the SOT-23, along with Vishay's high component count R Networks and R/C Networks in a variety of standard IC packages, provides you with the exact solution for your redesign or new design. Visit our website for the total picture on available R Networks and R/C Networks from our guaranteed stock program.

#### **SCHEMATICS**







D Tapped Filter

C AC Termination

A T Filter

#### **FEATURES**

- Resistor and capacitor integrated into a Thin Film Network
- · Filters at the source of emissions
- More consistent performance characteristics than discretes

#### **TYPICAL PERFORMANCE**

	TCR	TOLERANCE	
RESISTOR	200	10%	
	TCC	TOLERANCE	
CAPACITOR	200	20%	

VR TOOLED VALUES*			
SCHEMATIC	R (Ohms)	C (pF)	
D	33	47	
С	47	47	
А	100	80	

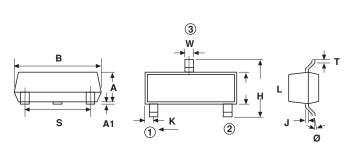
<sup>\*</sup>Consult Applications Engineering for Custom Values.

STANDARD ELECTRICAL SPECIFICATIONS			
TEST		SPECIFICATIONS	CONDITIONS
Resistance Ra	inge	10 $\Omega$ to 500 $\Omega$	
TCR:	Absolute	± 200ppm/°C	0°C to + 70°C
Tolerance:	Absolute	± 10% standard (R)	
	Absolute	± 20% standard (C)	@ 1MHz & VRMS over
	Absolute	± 20 % Standard (C)	+ 10°C to + 70°C
Power Rating:	Package	1W @ 70°C	
Power Rating	/ Resistor	100mW	
Capacitance F	Range (pF)	10 - 80	
Breakdown Voltage		25 - 45V	
Operating Temperature Range		0 to + 70°C	
Storage Temperature Range		- 55°C to + 125°C	

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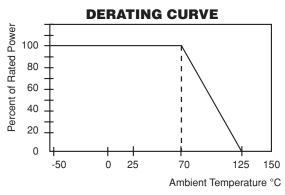
#### **DIMENSIONS AND IMPRINTING** in inches and millimeters



JEDEC STANDARD TO-236				
DIMENSION	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
Α	0.027	0.040	0.70	1.02
A1	0.001	0.004	0.02	0.15
В	0.105	0.120	2.67	3.04
S	0.071	0.079	1.80	2.00
W	0.015	0.021	0.38	0.54
L	0.083	1.03	2.10	2.64
Н	0.047	0.055	1.20	1.40
Т	0.024	0.010	0.13	0.40
J	0.003	0.008	0.089	0.15
K	0.017	0.022	0.44	0.55
Ø	0	8°	0	8°

IMPR	INTING
	SCHEMATIC
VRA	AA
VRC	AC
VRD	AD

MECHANICAL SPECIFICATIONS		
Resistive Element	Tantalum Nitride	
Capacitive Element	Thin Film	
Substrate Material	Silicon	
Body	Molded Epoxy	
Terminals	Copper Alloy	
Plating	Tin Lead	
Lead Coplanarity	0.0005 Inches	
Marking Resistance to Solvents	Permanency testing	
	per MIL-STD-202, Method 215	
Lead (Pb)-Free Option	100% Sn Matte	
Lead (Pb)-Free Finish	Plated	



PACKAGING INFORMATION		
MODEL	LEADS	TAPE AND REEL
VR	3	3000

#### **How to Order**

MODEL	Schematic	Resistance Value (Code $\Omega$ )/Capa	citor Tolerance (Code pF)	Packaging
VR	D = Tapped Filter C = AC Terminator A = T Filter	First 2 digits are significant figures. Last digit specifies number of zeros to follow	K =10% M = 20%	Tape & Reel T/R

VRT (Lead-(Pb)-free Version)

Note: For lead (Pb)-free please consult factory.

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Document Number: 60088 Revision 01-Feb-05 **RC NETWORKS**