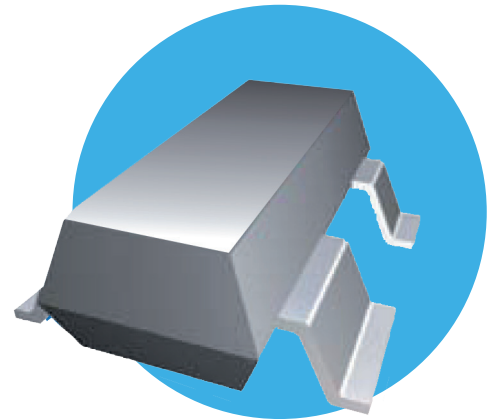


## SOT143 Surface Mount Resistor Networks

### SOT143 Series

- Ratio tolerances to  $\pm 0.05\%$
- Standard and custom circuits available
- Extremely small industry standard package
- RoHS compliant and Sn/Pb terminations available



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

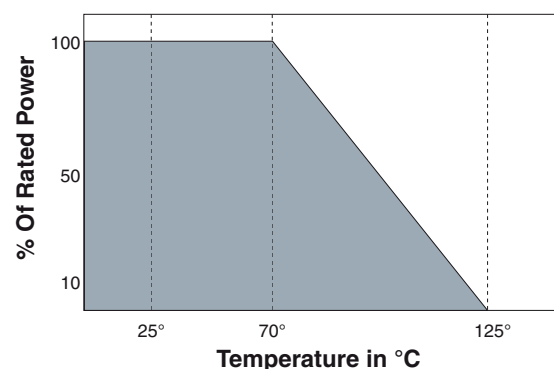
### Electrical Data

Characteristic	Value
Absolute Tolerance	To $\pm 0.1\%$
Ratio Tolerance	To $\pm 0.05\%$
Absolute TCR	To $\pm 25\text{ppm}/^\circ\text{C}$
Tracking TCR	To $\pm 2\text{ppm}/^\circ\text{C}$
Package Power Rating (70°C)	250mW
Element Power Rating (70°C)	100mW
Rated Operating Voltage (not to exceed $\sqrt{\text{Power} \times \text{Resistance}}$ )	100V
Operating Temperature Range	-55°C to +125°C
Noise	<-30dB
Substrate Material	Silicon

### Environmental Data

Test Per MIL-PRF-83401	Typical Delta R	Max Delta R
Thermal Shock	$\pm 0.02\%$	$\pm 0.1\%$
Power Conditioning	$\pm 0.03\%$	$\pm 0.1\%$
High Temperature Exposure	$\pm 0.03\%$	$\pm 0.05\%$
Short-time Overload	$\pm 0.02\%$	$\pm 0.05\%$
Low Temperature Storage	$\pm 0.03\%$	$\pm 0.05\%$
Life	$\pm 0.05\%$	$\pm 0.1\%$

### Power Derating Curve



#### 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.

SOT143 Series

## Schematic / Circuit Detail

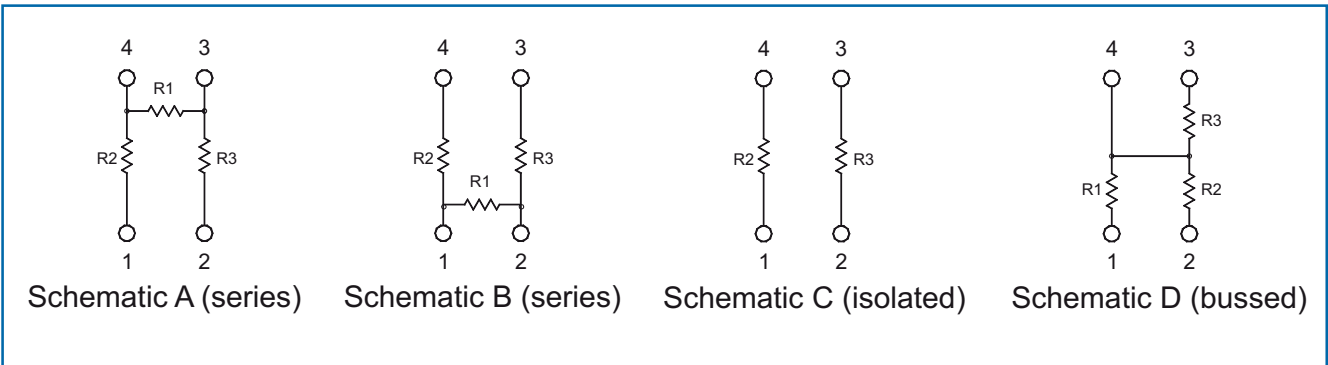
Schematic/ Circuit Code	R1 (Ω)	R2 (Ω)	R3 (Ω)	Available Absolute Tolerances	Available Ratio Tolerance	Available Absolute TCRs
A001	500.0	50.0K	50.0K	J, G, F	G, F, D, B	±100, ±50, ±25
A002	10.0K	10.0K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
A003	900.0	100.0	9.0K	J, G, F, B	G, F, D, B	±100, ±50, ±25
A004	500.0	48.0K	48.0K	J, G, F, B	G, F, D, B	±100, ±50, ±25
A005	200.0	40.0K	40.0K	J, G, F	G, F, D, B	±100, ±50, ±25
A006	2.5K	2.5K	2.5K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
A007	200.0	900.0	900.0	J, G, F	G, F, D, B	±100, ±50, ±25
A008	1.0K	500.0	500.0	J, G, F	G, F, D, B	±100, ±50, ±25
A009	500.0	30.0K	30.0K	J, G, F	G, F, D, B	±100, ±50, ±25
A010	400.0	25.0K	25.0K	J, G, F	G, F, D, B	±100, ±50, ±25
A011	2.0K	125.0K	125.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
A012	2.0K	125.0K	125.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
A013	300.0	40.0K	40.0K	J, G, F, B	G, F, D, B,	±100, ±50, ±25
A014	500.0	40.0K	40.0K	J, G, F, B	G, F, D, B,	±100, ±50, ±25
B001	10.0K	10.0K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
B002	900.0	100.0	9.0K	J, G, F	G, F, D, B	±100, ±50, ±25
B003	1.0K	10.0K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C001	N/A	10.0K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C002	N/A	1.0K	1.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C003	N/A	9.0K	1.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C004	N/A	750.0	750.0	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C005	N/A	100K	100K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C006	N/A	33.0K	330.0	J, G, F	G, F, D, B	±100, ±50, ±25
C007	N/A	2.0K	2.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C008	N/A	10.0K	2.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C009	N/A	10.0K	200.0	J, G, F	G, F, D, B	±100, ±50, ±25
C010	N/A	2.1K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C011	N/A	2.15K	10.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C012	N/A	10.0K	100.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C013	N/A	7.5K	7.5K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C014	N/A	500.0	500.0	J, G, F	G, F, D, B	±100, ±50, ±25
C015	N/A	49.9K	49.9K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C016	N/A	15.0K	15.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C017	N/A	30.0K	30.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C018	N/A	40.0K	40.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C019	N/A	50.0K	50.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C020	N/A	60.0K	60.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
C021	N/A	3.9K	4.992K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D001	121.0	1.33K	1.0K	J, G, F	G, F, D, B	±100, ±50, ±25
D002	2.0K	1.0K	2.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D003	50.0K	5.0K	5.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D004	5.4K	5.4K	27.5K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D005	40.0K	40.0K	40.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D006	10.0K	10.0K	20.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25
D007	20.0K	20.0K	20.0K	J, G, F, B	G, F, D, B, A	±100, ±50, ±25

**General Note**

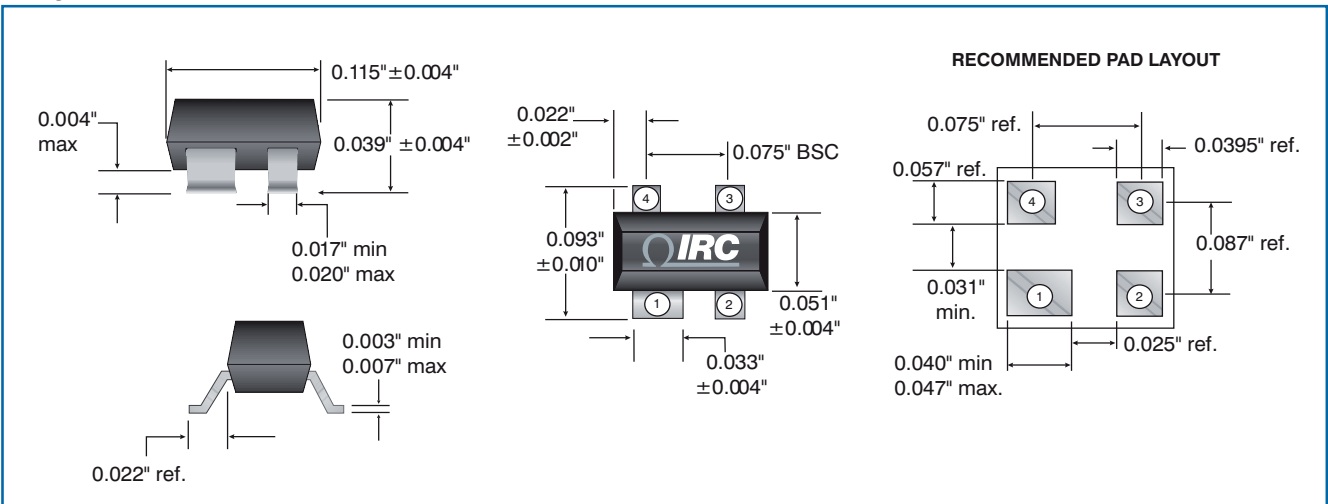
TT Electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

SOT143 Series

## Schematic Data



## Physical 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.

## Ordering Procedure

This product has two valid part numbers:

**European (Welwyn) Part Number: SOT143-A002-FB** (25ppm/°C, schematic A, circuit code 001, absolute tolerance ±1%, ratio tolerance ±0.1%, Pb-free)



1	2	3	4	5	6
Type	Absolute TCR	Schematic & Circuit Code	Absolute Tolerance	Ratio Tolerance	Termination & Packing
SOT143	Omit for ±25ppm/°C	See Table	B = ±0.1%	A = ±0.05%	Omit for Pb-free, Standard pack
	-02 = ±50ppm/°C		F = ±1%	B = ±0.1%	
	-01 = ±100ppm/°C		G = ±2%	D = ±0.5%	PB = SnPb finish, Standard pack
			J = ±5%	F = ±1%	
			G = ±2%	1000/reel	

**USA (IRC) Part Number: SOT-SOT143LF-03-A002-FB** (25ppm/°C, schematic A, circuit code 001, absolute tolerance ±1%, ratio tolerance ±0.1%, Pb-free)



1	2	3	4	5	6	7	Packing
Family	Model	Termination	Absolute TCR	Schematic & Circuit Code	Absolute Tolerance	Ratio Tolerance	
SOT	SOT143	Omit for SnPb (60/40)	03 = ±25ppm/°C	See Table	B = ±0.1%	A = ±0.05%	1000/reel
			02 = ±50ppm/°C		F = ±1%	B = ±0.1%	
		LF = Pb-free (100%Sn)	01 = ±100ppm/°C		G = ±2%	D = ±0.5%	
			J = ±5%		F = ±1%		
			G = ±2%				

### 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.