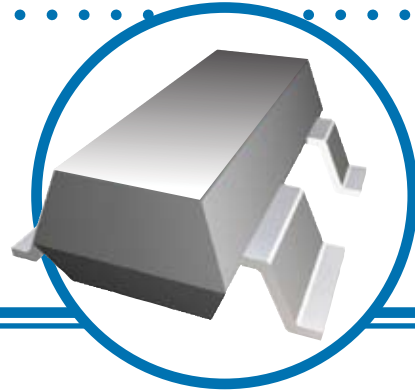


# SOT143

## 4-PIN SMT Package

### SOT143 Series

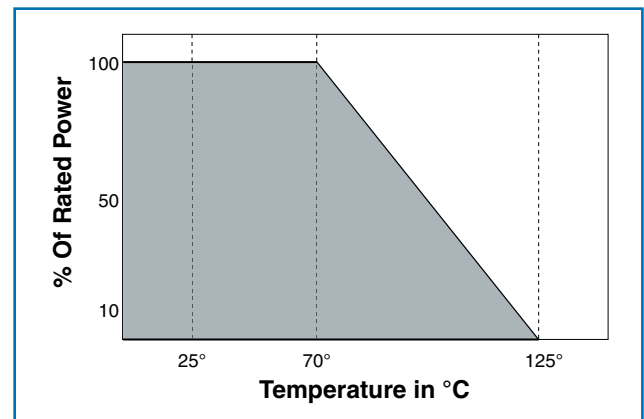
- Ratio tolerances to  $\pm 0.05\%$
- Small, industry standard package
- Standard and custom circuits available
- Standard Sn/Pb and Pb-free terminations available



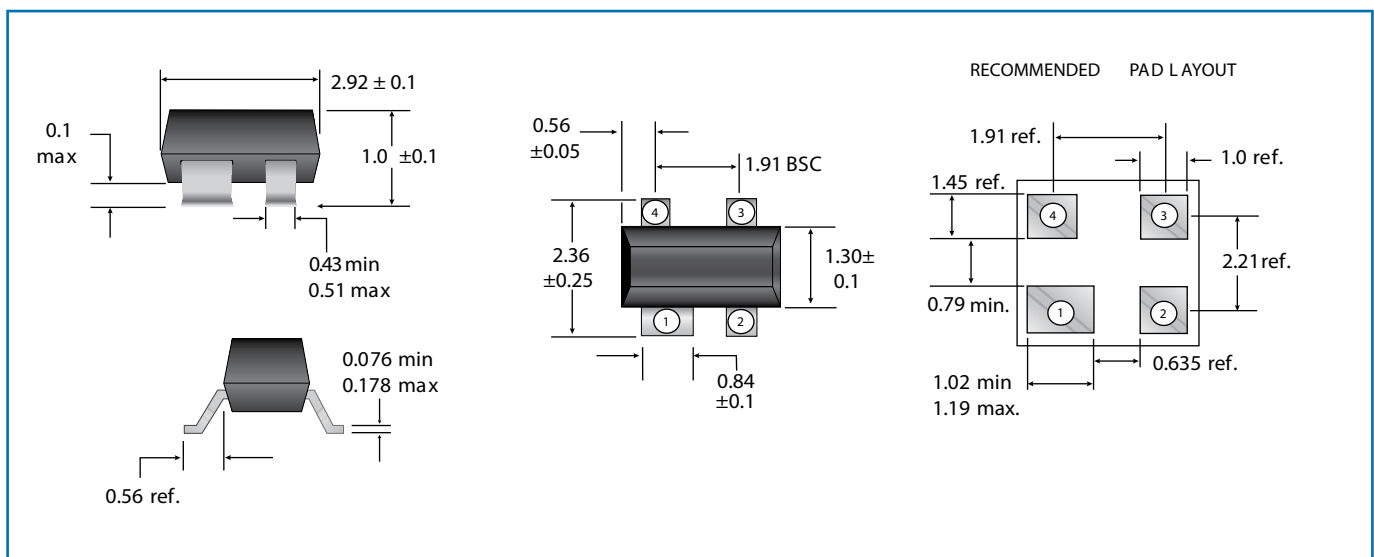
## Specifications

Characteristic	Value
Package Power Dissipation	0.25 Watts @70°C
Element Power Dissipation	0.1 Watts @70°C
Maximum Voltage Rating	100 Volts
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient Absolute	To $\pm 25\text{ppm}/^\circ\text{C}$
Temperature Coefficient Tracking	$\pm 2\text{ppm}/^\circ\text{C}$

## Power Derating Curve



## Physical Data (mm)



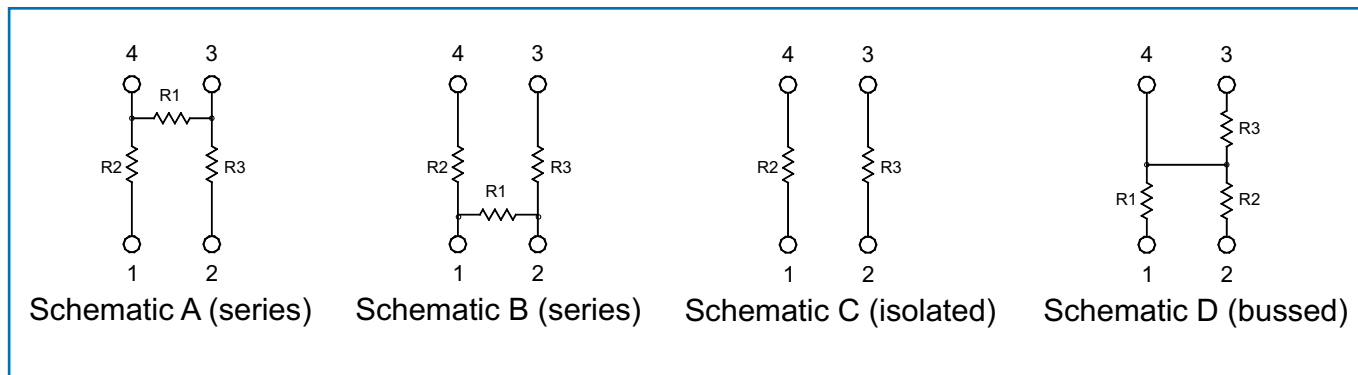
### General Note

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

# SOT143

## 4-PIN SMT Package

### Schematics



### Schematic / Circuit Detail

Circuit Details for Schematic A			
Schematic/Circuit Code	R1 ( $\Omega$ )	R2 ( $\Omega$ )	R3 ( $\Omega$ )
A001	500.0	50.0K	50.0K
A002	10.0K	10.0K	10.0K
A003	900.0	100.0	9.0K
A004	500.0	48.0K	48.0K
A005	200.0	40.0K	40.0K

Circuit Details for Schematic B			
Schematic/Circuit Code	R1 ( $\Omega$ )	R2 ( $\Omega$ )	R3 ( $\Omega$ )
B001	10.0K	10.0K	10.0K
B002	900.0	100.0	9.0K
B003	1.0K	10.0K	10.0K

Circuit Details for Schematic C			
Schematic/Circuit Code	R1 ( $\Omega$ )	R2 ( $\Omega$ )	R3 ( $\Omega$ )
C001	N/A	10.0K	10.0K
C002	N/A	1.0K	1.0K
C003	N/A	9.0K	1.0K
C004	N/A	750.0	750.0
C005	N/A	40.0K	40.0K
C006	N/A	33.0K	330.0
C007	N/A	2.0K	2.0K
C008	N/A	10.0K	2.0K
C009	N/A	10.0K	200.0
C010	N/A	2.1K	10.0K

Circuit Details for Schematic D			
Schematic/Circuit Code	R1 ( $\Omega$ )	R2 ( $\Omega$ )	R3 ( $\Omega$ )
D001	121.0	1.33K	1.0K
D002	2.0K	1.0K	2.0K
D003	50.0K	5.0K	5.0K
D004	5.4K	5.4K	27.5K
D005	40.0K	40.0K	40.0K
D006	10.0K	10.0K	20.0K
D007	20.0K	20.0K	20.0K

# SOT143

## 4-PIN SMT Package

### Environmental Data

Environmental Test To MIL-PRF-83401	Characteristic H Limit	Maximum	Typical Performance
Thermal Shock	±0.5%	±0.1%	±0.02%
Power Conditioning	±0.5%	±0.1%	±0.03%
Short Time Overload	±0.1%	±0.1%	±0.02%
High Temperature Exposure	±0.2%	±0.1%	±0.05%
Low Temperature Operation	±0.1%	±0.1%	±0.03%
Moisture Resistance	±0.4%	±0.1%	±0.03%
Life	±0.5%	±0.1%	±0.05%
Resistance to Solder Heat	±0.1%	±0.05%	±0.02%
Terminal Strength	±0.25%	±0.1%	±0.02%

### Ordering Procedure

SOT143 - 01 - A 002 - F B

Style

#### Absolute TCR Code

00 = ±250ppm/°C; 01 = ±100ppm/°C  
02 = ±50ppm/°C; 03 = ±25ppm/°C

#### Schematic Code

A, B, C, D

#### Circuit Number

See Schematic/Circuit Detail Tables

#### Absolute Tolerance Code

K = ±10%; J = ±5%; G = ±2%; F = ±1%  
D = ±0.5%; C = ±0.25%; B = ±0.1%

#### Ratio Tolerance Code

G = ±2%; F = ±1%; D = ±0.5%  
C = ±0.25%; B = ±0.1%; A = ±0.05%

#### Finish

Blank = pb-free  
PB = SnPb

For additional information or to discuss your specific requirements, please contact our Applications Team