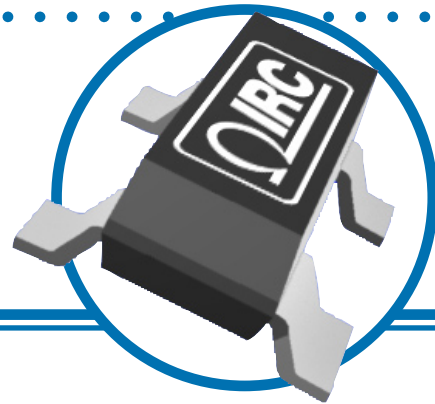


SOT143

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



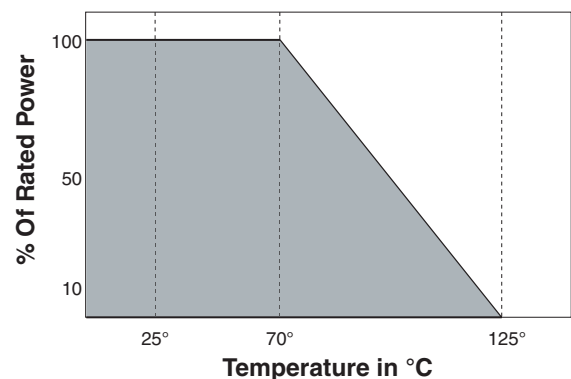
Specifications

Characteristic	Value
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	$\pm 0.03\%$	$\pm 0.05\%$

Power Derating Curve



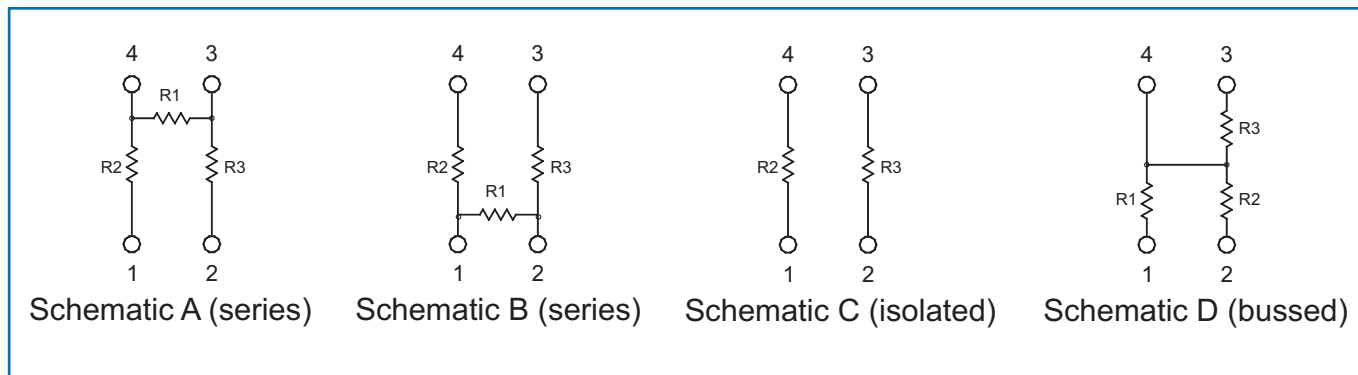
General Note

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.

SOT143

4-PIN SMT Package

Schematics



Schematic / Circuit Detail

Circuit Details for Schematic A			
Schematic/Circuit Code	R1 (Ω)	R2 (Ω)	R3 (Ω)
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 (Ω)	R2 (Ω)	R3 (Ω)
B001	10.0K	10.0K	10.0K
B002	900.0	100.0	9.0K
B003	1.0K	10.0K	10.0K

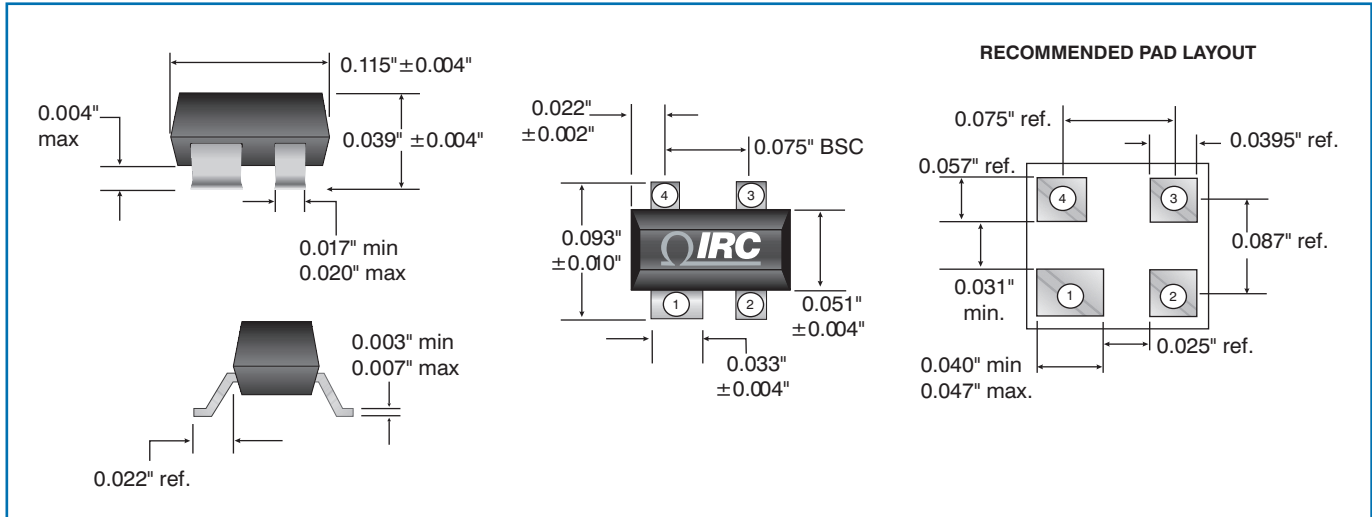
Circuit Details for Schematic C			
Schematic/Circuit Code	R1 (Ω)	R2 (Ω)	R3 (Ω)
C001	N/A	10.0K	10.0K
C002	N/A	1.0K	1.0K
C003	N/A	9.0K	1.0K
C004	N/A	750.0	750.0
C005	N/A	100K	100K
C006	N/A	33.0K	330.0
C007	N/A	2.0K	2.0K
C008	N/A	10.0K	2.0K
C009	N/A	10.0K	200.0
C010	N/A	2.1K	10.0K
C011	N/A	2.15K	10.0K
C012	N/A	10.0K	100K

Circuit Details for Schematic D			
Schematic/Circuit Code	R1 (Ω)	R2 (Ω)	R3 (Ω)
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

Physical Data



Ordering Procedure

Prefix **SOT** - **SOT143** - **01** - **A** **002** - **F** **B**

Style
 SOT143 = SOT143 with standard Sn/Pb termination
 SOT143LF = SOT143 with Pb-free terminations

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%

For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.