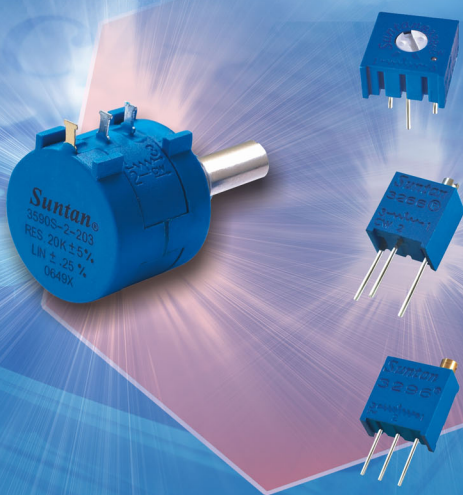


三泰 科技 有 限 公 司
Suntan® Technology Company Limited



玻璃釉微調電位器
Square Trimming Potentiometer

Trimming Potentiometer



PRODUCT SPECIFICATIONS:

	TSR-3006	TSR-3362	TSR-3296	TSR-3266	TSR-3386
Standard Resistance Range	10Ω-5MΩ	10Ω-5MΩ	10Ω-5MΩ	10Ω-5MΩ	10Ω-5MΩ
Resistance Tolerance	±10%	±10%	±10%	±10%	±10%
Absolute Minimum Resistance	≤1%R or 5n	≤1%R or 10n	≤1%R or 10n	≤1%R or 10Ω	≤1%R or 10n
Contact Resistance Variation	CRV≤4% or 5n	CRV≤3% or 5n	CRV≤3% or 5n	CRV≤3% or 5Ω	CRV≤3%
Insulation Resistance	R1≥1GΩ(100Vac)	R1≥1GΩ(500Vac)	R1≥1GΩ(100Vac)	R1≥1GΩ(100Vac)	R1≥1GΩ(100Vac)
Withstand Voltage	640Vac	700Vac	640Vac	500Vac	600Vac
Effective Travel	22±2 turns nom	250°±10°	30±2 turns nom	12±2 turns nom	300°±10°
Power Rating (315volts max)	0.75W@70°C 0W@125°C	0.5W@70°C 0W@125°C	0.5W@70°C 0W@125°C	0.25W@70°C 0W@125°C	0.5W@70°C 0W@125°C
Temperature Range	-55°C~+125°C	-55°C~+125°C	-55°C~+125°C	-55°C~+125°C	-55°C~+125°C
Temperature Coefficient	250 or ±100ppm/°C	250 or ±100ppm/°C	±250 or ±100ppm/°C	±250 or ±100ppm/°C	±250 or ±100ppm/°C
Temperature Variation	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R, Δ(Uab/Uac)≤5%	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R, Δ(Uab/Uac)≤5%	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R, Δ(Uab/Uac)≤5%	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R, Δ(Uab/Uac)≤5%	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R, Δ(Uab/Uac)≤10%
Vibration	10-500Hz,0.75mm,6h ΔR≤5%R, Δ(Uab/Uac)≤7.5%R	10-500Hz,0.75mm,6h ΔR≤5%R, Δ(Uab/Uac)≤7.5%R	10-500Hz,0.75mm,6h ΔR≤5%R, Δ(Uab/Uac)≤7.5%R	10-500Hz,0.75mm,6h ΔR≤5%R, Δ(Uab/Uac)≤7.5%R	10-500Hz,0.75mm,6h ΔR≤5%R, Δ(Uab/Uac)≤7.5%R
Collision	390m/s ² ,4000cycles, ΔR≤5%R	390m/s ² ,4000cycles, ΔR≤5%R	390m/s ² ,4000cycles, ΔR≤5%R	390m/s ² ,4000cycles, ΔR≤5%R	100m/s ² ,4000cycles, ΔR≤5%R
Electrical Endurance at 70°C	0.75W@70°C,1000h, ΔR≤10%R, CRV≤3% or 5Ω	0.5W@70°C,1000h, ΔR≤10%R, R1≤100MΩ	0.5W@70°C,1000h, ΔR≤10%R, CRV≤3% or 5Ω	0.25W@70°C,1000h, ΔR≤10%R, CRV≤3% or 5Ω	0.5W@70°C,1000h ΔR≤10%R,Δ(Uab/Uac) ≤10%,CRV≤3% or 5Ω
Rotational Life	200 cycles, ΔTR≤10%R, CRV≤3% or 5n	200 cycles, ΔTR≤10%R, CRV≤3% or 5n	200 cycles, ΔTR≤10%R, CRV≤3% or 5n	200 cycles, ΔTR≤10%R, CRV≤3% or 5Ω	200 cycles, ΔTR≤10%R, CRV≤3% or 5n
Starting Torque	≤35mN·m	≤35mN·m	≤35mN·m	≤35mN·m	≤35mN·m
Marking	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model
Standard Packaging	(25pcs, per tube)	(50pcs, per tube)	(50pcs, per tube)	(50pcs, per tube)	(50pcs, per tube)

Trimming Potentiometer



PRODUCT SPECIFICATIONS:

	TSR-3323	TSR-3318	TSR-3306	TSR-3309
Standard Resistance Range	10Ω-2MΩ	100Ω-1MΩ	100Ω-1MΩ	10Ω-2MΩ
Resistance Tolerance	±10%	±30%	±30% std	±30% std
Absolute Minimum Resistance	≤1%R or 10n			
Contact Resistance Variation	CRV≤3% or 5n		1% max(≤2K=30Ω)	1% max(≤2K=30Ω)
Insulation Resistance	R1≥1GΩ(500Vac)			
Withstand Voltage	707Vac			
Effective Travel	250°±10°			
Power Rating (315volts max)	0.25W@70°C,0W@125°C			
Temperature Range	-55°C~+125°C			
Temperature Coefficient	250 or ±100ppm/°C			
Temperature Variation	-55°C,30min,+125°C, 30min,5 cycles, ΔR≤5%R,Δ(Uab/Uac)≤5%			
Vibration	10-500Hz,0.75mm, 6h,ΔR≤5%R, Δ(Uab/Uac)≤7.5%R			
Collision	390m/s ² ,4000cycles, ΔR≤5%R			
Electrical Endurance at 70°C	0.25W@70°C,1000h, ΔR≤10%R, CRV≤4% or 5n			
Rotational Life	200 cycles, ΔTR≤10%R,CRV≤3% or 5n			
Starting Torque	≤30mN·m			
Marking	Resistance Tolerance (When no identification, it is of ±10%) Resistance Code, Model			
Standard Packaging	(50pcs, per tube)			
Standard Resistance Range		100Ω-1MΩ	100Ω-1MΩ	10Ω-2MΩ
Resistance Tolerance		±30%	±30% std	±30% std
Absolute Minimum Resistance				
Contact Resistance Variation		10% max	CRV≤3% max	3% max
Resistance		Infinite	Essentially	Essentially infinite
Adjustment Angle		210°±20°	215°nom	235°nom
Power Rating		100-500KΩ-0.5V >500KΩ-0.25V 50°C-----0.1W	70°C,0.3W	70°C,0.5W
Temperature Range		-10°C to +70°C	-30°C ~ +100°C	-30°C ~ +100°C
Temperature Coefficient		±1000ppm/°C	±250ppm/°C	±250ppm/°C
Load Life		240 hours 0.1Watt 50°C(+5% - 20%)	1,000 hours 0.3W 70°C (3% ΔTR)	1,000 hours 0.5W 70°C (3% ΔTR)
Mechanical Angle			240°±10°	260°±10°
Torque(Operating)		20-250g-cm	3.5oz-in.max	4.0oz-in.max
Stop Strength			7.0oz-in.max	7.0oz-in.max
Terminals		Solderable pins	Solderable pins	Solderable pins
Marking		Resistance code, date code	Manufacturers Trademark, resistance code, date code	Manufacturers Trademark, resistance code, date code
Standard packaging		500pcs.Per code	2000pcs.Per bag	2000pcs.Per bag
Aqueous cleaning not recommended				

Trimming Potentiometer

PRODUCT SPECIFICATIONS:							
	TSR-65M	TSR-805	TSR-625	TSR-655	TSR-855	TSR-633	TSR-825
Standard Resistance Range	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)	100Ω to 1Meg ohm (see standard resistance table)
Resistance Tolerance	±20%(TK±25%)	±20%(TK±25%)	±20%(TK±25%)	±20%(TK±25%)	±20%(TK±25%)	±20%(TK±25%)	±20%(TK±25%)
Adjustment Angle	240° ±20°	280° ±15°	240° ±20°	240° ±20°	280° ±15°	240° ±20°	280° ±15°
Residual Resistance	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)	≤500Ω, 10Ω>500Ω, 2%(TK≤1KΩ, 2KΩ>1KΩ, 5%)
Power Rating Max Working Voltage	100V	250V(TK0.1 Watt)	100V	100V	250V(TK0.1 Watt)	100V	250V(TK0.1 Watt)
70°C	0.3Watt(TK0.1 Watt)	0.3Watt(TK0.2 Watt)	0.3Watt(TK0.1 Watt)	0.3Watt(TK0.1 Watt)	0.3Watt(TK0.2 Watt)	0.3Watt(TK0.1 Watt)	0.3Watt(TK0.2 Watt)
Temperature Range	-30°C to +85°C (TK -10°C to +70°C)	-30°C to +100°C (TK -25°C to +100°C)	-30°C to +85°C (TK -10°C to +70°C)	-30°C to +85°C (TK -10°C to +70°C)	-30°C to +100°C (TK -25°C to 100°C)	-30°C to +85°C (TK -10°C to +70°C)	-30°C to +100°C (TK -25°C to 100°C)
Temperature Coefficient	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)	±250ppm/°C (TK±1000ppm/°C)
Rotational Life	±10%(TK±15%)	±10%(TK±15%)	±10%(TK±15%)	±10%(TK±15%)	±10%(TK±15%)	±10%(TK±15%)	±10%(TK±15%)
Load Life	500 hours 0.3 Watt 70°C ±5%(TK 240 hours 0.1 Watt 50°C +5%-20%)	1000 hours 0.3 Watt 70°C ±5%(TK 500 hours 0.2 Watt 70°C ≤100KΩ, +7% >100KΩ, ±10%)	500 hours 0.3 Watt 70°C ±5%(TK 240 hours 0.1 Watt 50°C +5%-20%)	500 hours 0.3 Watt 70°C ±5%(TK 240 hours 0.1 Watt 50°C +5%-20%)	1000 hours 0.3 Watt 70°C ±5%(TK 500 hours 0.2 Watt 70°C ≤100KΩ, +7% >100KΩ, ±10%)	500 hours 0.3 Watt 70°C ±5%(TK 240 hours 0.1 Watt 50°C +5%-20%)	1000 hours 0.3 Watt 70°C ±5%(TK 500 hours 0.2 Watt 70°C ≤100KΩ, +7% >100KΩ, ±10%)
Torque(Operating)	30~300gf.cm	50~350gf.cm	30~300gf.cm	30~300gf.cm	50~350gf.cm	30~300gf.cm	50~350gf.cm
Stop Strength	0.8kgf.cm	0.8kgf.cm	0.8kgf.cm	0.8kgf.cm	0.8kgf.cm	0.8kgf.cm	0.8kgf.cm
Soldering Conditions	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds	240°C to 260°C And within 3 seconds
Marking	Resistance Code	Resistance Code	Resistance Code	Resistance Code	Resistance Code	Resistance Code	Resistance Code
Standard Packing	500 PCS Per bag	500 PCS Per bag	500 PCS Per bag	500 PCS Per bag	500 PCS Per bag	500 PCS Per bag	500 PCS Per bag
Aqueous cleaning not recommended							

Trimming Potentiometer

PRODUCT SPECIFICATIONS:				SMD	
	TSR-3329	TSR-105H	TSR-065		TSR-3305
Standard Resistance Range	50Ω-2MΩ	10Ω-2MΩ	100Ω-2MΩ	Standard Resistance Range 10Ω to 1MΩ (see standard resistance table) Resistance Tolerance ±25% Adjustment Angle 220° ±20° Residual Resistance ≤1KV, 20Ω>1K, 2% Power Rating 50V 70°C 0.1 Watt Temperature Range -55°C to 125°C Temperature Coefficient ±250ppm/°C Rotational Life ±10% Load Life 100 hours 0.1 Watt 70°C +5% Contact Resistance variation 5% max Torque(Operating) 20~200gf.cm Soldering Conditions 220°C to 240°C And within 5 seconds Marking Resistance Code Standard Packing 2000 Purchase / 7 REEL Aqueous cleaning not recommended	
Resistance Tolerance	±10%	±10%, ±20%, ±30%	±30%		
Absolute Minimum Resistance	≤1%R or 10n	10Ω Maximum	Max 5% of Nominal Resistance, But under 30Ω		
Contact Resistance Variation	CRV≤3% or 5n	Logarithm(A) Linear(B) Anti Logarithm(C)	Linear(B)		
Insulation Resistance	RI≥1GΩ(100Vac)	Linear(B), 0.15W Non Linear(A, C), 0.07W	0.1W		
Withstand Voltage	500Vac	Linear(B), 250VDC Non Linear(A, C), 125VDC	50V Max		
Effective Travel	280° ±10°	5000 Cycles Long Life: 10,000 Cycles	Max ±5% change in resistance after 100 unloaded rotations		
Power Rating (315volts max)	0.5W@70°C, 0W@125°C	Rated Power	Max ±5% change in resistance after 3 hours loaded		
Temperature Range	-55°C~+125°C	Operating Voltage	Temperature Range		
Temperature Coefficient	±250 or ±100ppm/°C	Potational Life	Temperature Coefficient		
Temperature Variation	-55°C, 30min, +125°C, 30min, ΔR≤5%R, Δ(Uab/Uac)≤5%	Load Life	Rotational Life		
Vibration	10~500Hz, 0.75mm, 6h, ΔR≤5%R, Δ(Uab/Uac)≤7.5%R	Rotational Angle	Load Life		
Collision	390m/s², 400cycles, ΔR≤5%R	Rotational Torque	Contact Resistance variation		
Electrical Endurance at 70°C	0.5W@70°C, 1000h, ΔR≤10%R, CRV≤3% or 5Ω	Stop-end Strength	Torque(Operating)		
Rotational Life	(200 cycles)ΔTR≤4%R, CRV≤3% or 5n	Operating Temp	Soldering Conditions		
Starting Torque	≤35mN·m	Temp Characteristics	Marking		
Marking	Resistance Tolerance (When no identification, it is of ±10% Resistance Code, Model	Humidity Char	Standard Packing		
Standard Packaging	(50pcs, per tube)	Temperature			
		Time			

Trimming Potentiometer

Square SMD

PRODUCT SPECIFICATIONS:



TSR-3361

Standard Resistance Range	10Ω-2MΩ (see standard resistance table)
Resistance Tolerance	±10% std (tighter tolerance available)
Absolute Minimum Resistance	1% or 2 ohms (whichever is greater)
Contact Resistance Variation	3% or 3 ohms max (whichever is greater)
Voltage	±5%
Resistance	±0.15%
Resolution	Infinite
Insulation Resistance	500vdc/1,000 megohms min
Sea Level	900 vac
80,000 Feet	350 vac
Adjustment Angle	240 nom
Maximum Soldering Exposure	+245°C/10 seconds.
Power Rating (300 volts max)	70°C - 0.5 watt & 125°C - 0 Watt
Temperature Range	-55°C to 125°C
Seal Test	85°C Fluorinert
Humidity	MIL-STD-202 Method 103 96 hours (2% TR; 10 Megohms IR)
Vibration	30G (1% TR; 1% VR)
Shock	100G (1% TR; 1% VR)
Load Life	1000 hours 0.5 watt @ 70°C (3% TR; 3% or 3 ohms. Whichever is greater CRV)
Rotational Life	200 cycles/(4% TR; 3% or ohms. Whichever is greater CRV)
Mechanical Angle	270 ohm
Toque	3.0oz - in. max
Stop Strength	7.0oz - in. max
Terminals	Solderable pins
Weight	0.02 oz
Marking	Resistance Code. Terminal numbers. Manufacturers model number style
Wiper	50% (Actual TR) ±10%
Flammability	UL 94V-0
Standard Packaging	1,000 per reel
Adjustment Tool	H - 90

Precision Pots

PRODUCT SPECIFICATIONS:



TSR-3540S

Standard Resistance Range	100 to 100K ohms
Total Resistance Tolerance	±5%
Independent Linearity	±0.25%
Effective Electrical Angle	3600° ±10°
Absolute Minimum Resistance/ Minimum Voltage	1 ohm or 0.2% max (Whichever is greater)
Noise/Output smoothness	100 ohms ENR max
Dielectric Withstanding Voltage (MIL-STD-202, method 301)	1000 VAC minimum
Power Rating	2 watts 0 watt
Insulation Resistance(500 VDC)	1000 meg ohms min
Resolution	See recommended part#
Operating Temperature Range	+1°C to +125°C
Storage Temperature Range	-55°C to +125°C
Temperature Coefficient Over Storage Temperature Range	±100 ppm/°C maximum/unit
Vibration	15G
Wiper Bounce	0.1 millisecond maximum
Shock	50G
Load Life	1000 hours, 2 watts
Total Resistance Shift	±2%
Rotational Life(No load)	1,000,000 shaft revolutions
Total Resistance shift	±5% maximum
Moisture Resistance	±2% maximum
IP Rating	IP 40
Stop Strength	53 N-cm (75 oz-in) minimum
Mechanical Angle	3600° ±10°
Torque(Starting & Running)	0.35 N-cm(0.5 oz-in) max
Mounting	170-200 N-cm (15-18 lb.-in.)max
Backlash	1.0° maximum
Weight	Approximately 21 gm
Soldering Condition Manual Soldering	96.5Sn/3.0Ag/0.5Cu solid wire or no-clean rosin cored wire; 370°C(700°F)max. For 3 seconds
Wave Soldering	96.5Sn/3.0Ag/0.5Cu solid wire or no-clean flux; 260°C(500°F)max. For 3 seconds
Wash Processes	Not recommended
Marking	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram and date code
Ganging(Multiple Section Pots)	2 cups maximum
Hardware	One lockwasher(H-37-2) and one mounting nut(H-38-2) is shipped with each potentiometer



TSR-3590

Standard Resistance Range	1KΩ-100KΩ
Resistance Tolerance	±5%
Independent Linearity	±0.5%
Effective Electrical Travel	≥3600° ± 10°
Treninal Resistance	≤0.2% or 5Ω
Noise	≤3% R or 5Ω
Insulation Resistance	R ≥ 1GΩ
Withstand Voltage	101.3kPa710V, 8.5kPa470V
Power Rating	0.5W@70°C, 0W@125°C
Temperature Range	-55°C-+125°C
Temperature Coefficient	±100ppm/°C
Temperature Variation	ΔR ≤ ±2%R, Δ(Uab/Uac) ≤ ±1%
Collision	390m/s ² , 4000cycles, R ≤ 1%R
Vibration	10-500Hz, 0.75mm or 98m/s ² , 6h ΔR ≤ ±1%R, Δ(Uab/Uac) ≤ ±2%
Climate Category	ΔR ≤ ±3%R, R ₀ ≥ 100MΩ
Electrical Endurance at 70°C	2W, 1000h, ΔR ≤ ±3%R
Mechanical Endurance	10000 cycles, ΔR ≤ ±3%R
Steady damp-heat	ΔR ≤ ±3%R, R ₀ ≥ 100MΩ
Total Mechanical Travel	≥3600° ± 10°
Staring Torque	≤360mN-m
Clutch Torque	≥300mN-m
Standard Packaging	10pcs/box; 20pcs/box