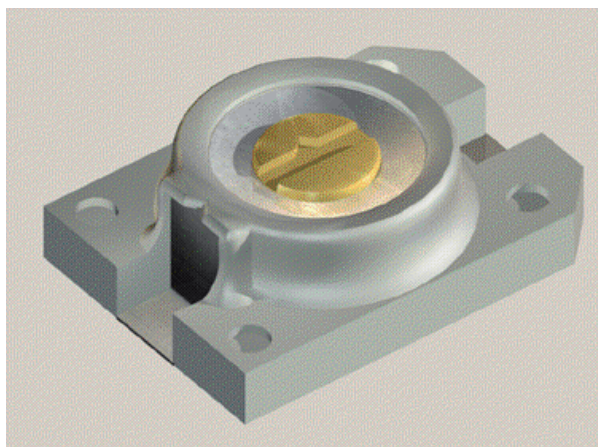


CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 0300 RoHS & AT 1300 RoHS

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

Description

Very compact package type
 Ceramic dielectric
 Special design for reflow soldering use
 Rated voltage 100 VDC
 Low temperature coefficient
 Low capacitance drift
 Very stable over time
 Terminals are pure tin plated
 ROHS compliant
 High resonance frequency and very good Q
 Special design for easy vacuum pickup
 Delivered on 12 mm tape and reel
 Maximum Soldering Temperature 265°C, 3 s Max



Applications

Mobile and Radio communications equipments :
 Filters, Oscillators
 TCXO, VCO
 Control remote
 Security systems
 Low power amplifiers

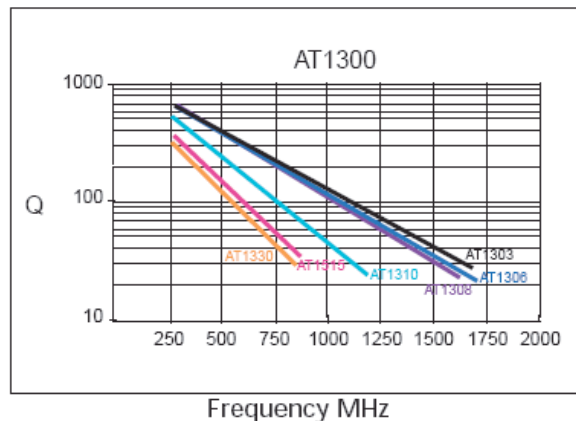
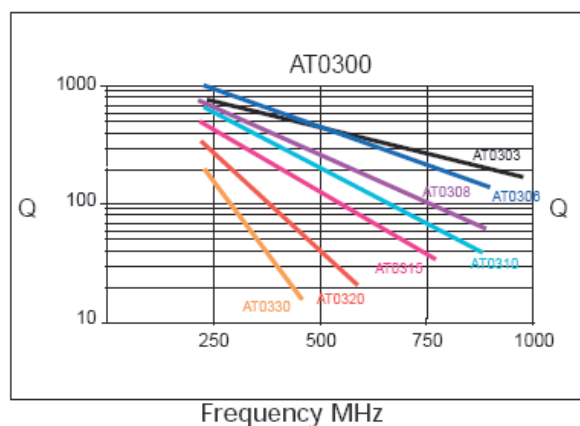
I. Electrical specifications

P/N	AT 0303 AT 1303	AT 0306 AT 1306	AT 0308 AT 1308	AT 0310 AT 1310	AT 0315 AT 1315	AT 0320 AT 1320	AT 0330 AT 1330	AT 0340 AT 1340
From below	1.5	2.0	3.0	2.0	3.0	4.5	5.5	8.0
Capacitance range (pF)	+50%	+50%	+50%	+50%	+50%	+50%	+50%	+50%
To above +50%/-0	3.0 ₋₀	6.0 ₋₀	8.0 ₋₀	10.0 ₋₀	15.0 ₋₀	20.0 ₋₀	30.0 ₋₀	40.0 ₋₀
Working Voltage (VDC)	100							
Withstanding Voltage (VDC)	220							
Working Temp. range	-40°C to +85°C							
Temp. Coeff. (ppm/°C)	0+/-200	0+/-300	-750+/-500	0+/-300	0+/-300	0+/-500	-750+/-500	-750+/-500
Capacitance drift (pF)	0.1 Max		0.2 Max	0.3 Max	0.4 Max	0.5 Max	1.0 Max	1.2 Max
Setting drift	< 1%							
Typical Self-Resonance Frequency at CMax (GHz)								
AT 0300 series	2.0	1.4	1.2	1.1	0.9	0.8	0.6	0.4
AT 1300 series	2.3	1.6	1.4	1.2	1.0	0.9	0.7	0.5
Insulation Resistance (MΩ)	10000 min							

CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 0300 RoHS & AT 1300 RoHS

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

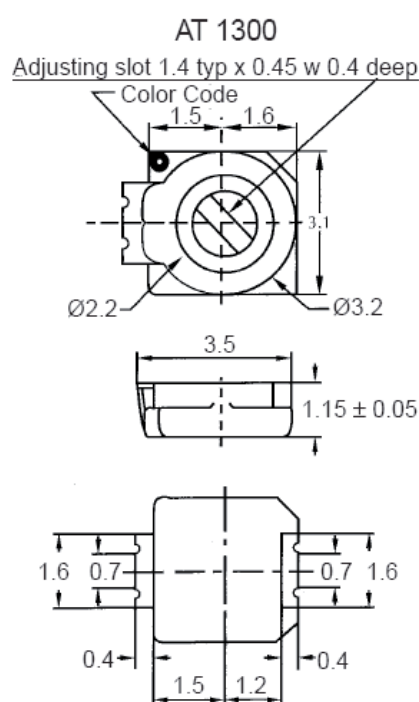
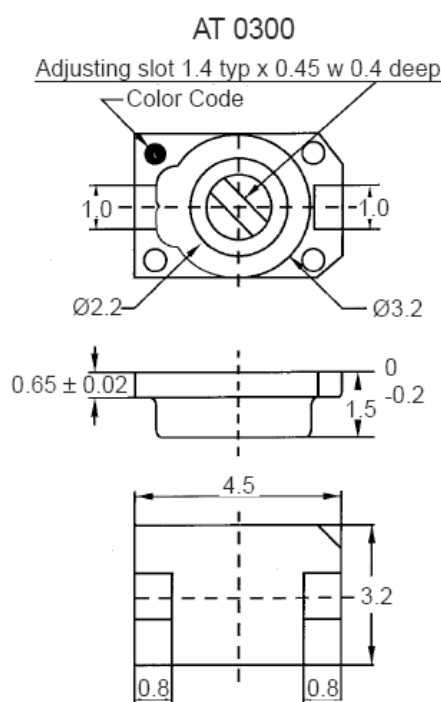
II. Quality factor



III. Mechanical and general specifications

P/N	AT 1303 AT 0303	AT 1306 AT 0306	AT 1308 AT 0308	AT 1310 AT 0310	AT 1315 AT 0315	AT 1320 AT 0320	AT 1330 AT 0330	AT 1340 AT 0340
Color Code	Black	Blue	Violet	White	Pink	Red	Orange	Yellow
Rotating Torque	10 to 70 g.cm							
Tensile strength of terminal	500 g							
Resistance to axial load	250 g min							

IV. Outline dimensions

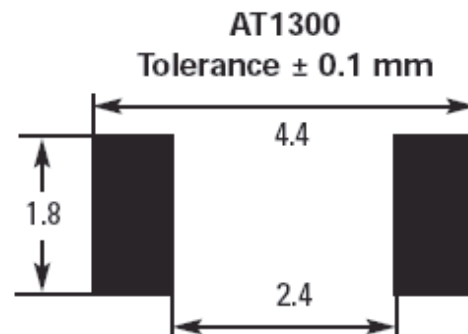
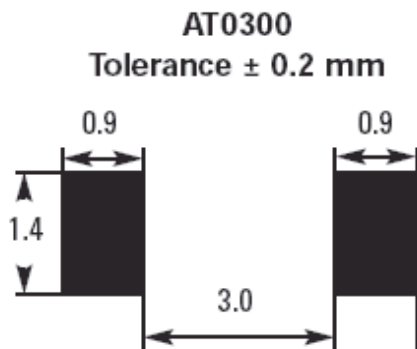


CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 0300 RoHS & AT 1300 RoHS

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

V. Soldering

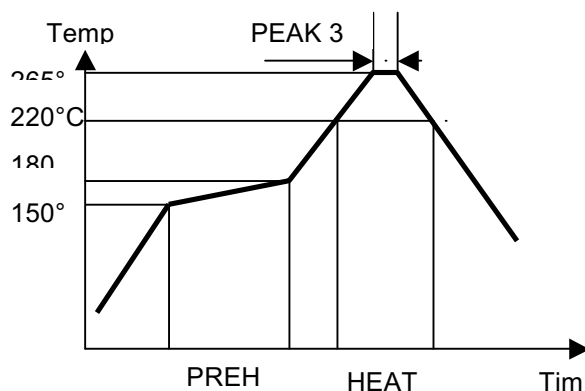
Typical solder pad layout



Thickness of printed solder: 0.15 mm

Recommended reflow solder temperature profile

Maximum Soldering Temperature 265°C MAX



VI. Packaging

Parts are delivered

- in bulk for quantity lower than 1 kp
- on tape and reel in 12 mm width carrier tape in quantities of 1 kp on 7 inches reel

VII. How to order

Parts in quantity < 1 kp

Example

Reference	ROHS
AT 1310	RoHS

Parts on tape and reel :

Example

Reference	R2	ROHS
AT 0303	R2	ROHS

CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 0300 RoHS & AT 1300 RoHS

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

VIII. Tuning

Recommended Tuning Tool reference: AT 8777

When tuning, do not apply an axial force higher than 1.5 N (150 g)

VIII. Storage conditions

Do not store components under direct sunlight or in dewy environment, and in corrosive condition.

Before use, store components under condition of -10°C to +40°C and humidity of 75% RH Max.

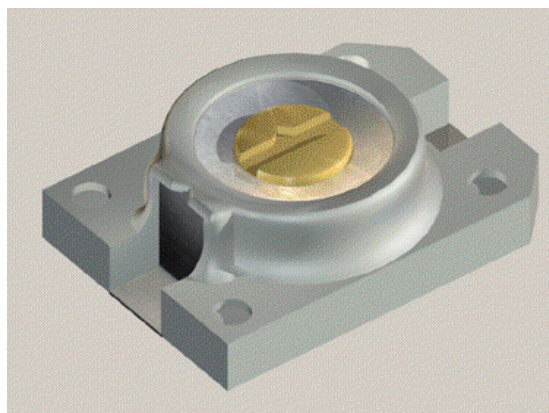
It is recommended to use components within 6 months after delivery

HIGH VOLTAGE CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 03HV00 SERIES

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

Description

Very compact package type
 Ceramic dielectric
 Special design for reflow soldering use
 Rated voltage **350 VDC** (test **770 VDC**)
 Low temperature coefficient
 Low capacitance drift
 Very stable over time
 Terminals are **pure tin plated**
 High resonance frequency and very good Q
 Special design for easy vacuum pickup
 Delivered on 12 mm tape and reel
RoHS compliant
Maximum Soldering Temperature 265°C, 3 s Max



Applications

High power radio transmission
 Power amplifier for cellular base station
 Amplifier for cable TV

I. Electrical specifications

P/N	AT 03HV03 RoHS	AT 03HV06 RoHS	AT 03HV08 RoHS	AT 03HV10 RoHS	AT 03HV15 RoHS	AT 03HV20 RoHS
From below	1.5	2.0	3.0	2.0	3.0	4.5
Capacitance range (pF)	+50%	+50%	+50%	+50%	+50%	+50%
To above	3.0 ₋₀	6.0 ₋₀	8.0 ₋₀	10.0 ₋₀	15.0 ₋₀	20.0 ₋₀
Working Voltage(VDC)	350					
Withstanding Voltage(VDC)	770					
Working Temp. range	-40°C to +85°C					
Temp. Coeff. (ppm/°C)	0+/-200	0+/-300	-750+/-500	0+/-300	0+/-500	0+/-500
Capacitance drift (pF)	0.1 Max	0.1 Max	0.2 Max	0.3 Max	0.4 Max	0.5 Max
Setting drift	<1%					
Typical Self-Resonance Frequency at CMax (GHz)	2.0	1.4	1.2	1.1	0.9	0.8
Insulation Resistance (MΩ)	10000 min					
Q @ 1 Mz, Cmax	500 min					

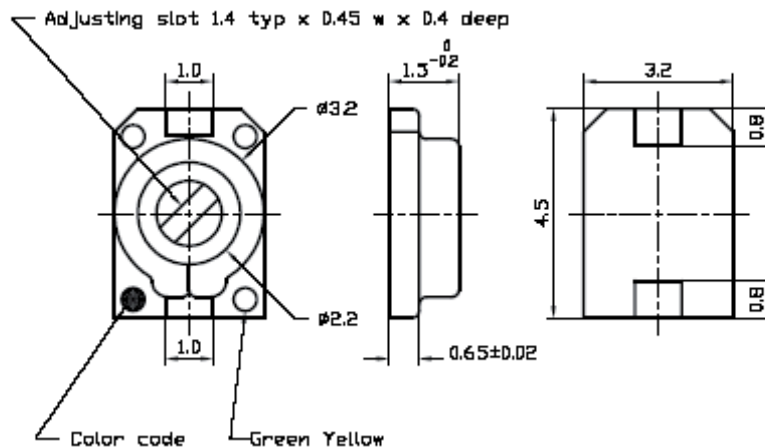
II. Mechanical and general specifications

P/N	AT 03HV03 RoHS	AT 03HV06 RoHS	AT 03HV08 RoHS	AT 03HV10 RoHS	AT 03HV15 RoHS	AT 03HV20 RoHS
Color Code	Black	Blue	Violet	None	Pink	Red
Rotating Torque	10 to 70 g.cm					
Tensile strength of terminaison	250 g					
Resistance to axial load	500 g					

HIGH VOLTAGE CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 03HV00 SERIES

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

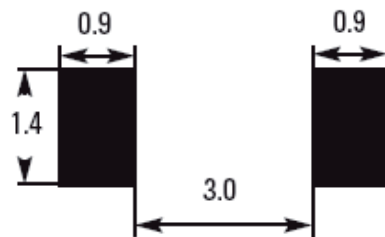
III. outline dimensions



Green Yellow dot means AT 03HV00 ROHS series, and color dot indicates reference of the model

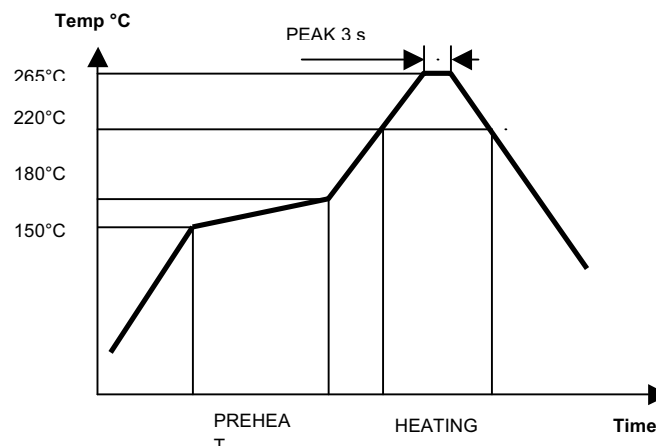
IV. soldering

AT 03HV00 ROHS Series Typical solder pad layout Tolerance ± 0.2 mm



Thickness of printed solder: 0.15 mm

Recommended reflow solder temperature profile Maximum Soldering Temperature 265°C MAX



HIGH VOLTAGE CHIP TRIM CERAMIC TRIMMER CAPACITORS AT 03HV00 SERIES

SURFACE MOUNT TRIMMER CAPACITORS, RoHS COMPLIANT

V. Packaging

Parts are delivered :

- on tape and reel in 12 mm width carrier tape in quantities of 1 kp on 7 inches reel
- in bulk for quantity lower than 1 kp

VI. How to order

Parts on tape and reel :

Reference **R2** **RoHS**

Example

AT 03HV03 R2 RoHS

Parts in quantity < 1 kp

Reference **RoHS**

Example

AT 03HV10 RoHS

VII. Tuning

Recommended Tuning Tool reference: AT 8777

When tuning, do not apply an axial force higher than 1.5 N (150 g)

VIII. Storage conditions

Do not store components under direct sunlight or in dewy environment, and in corrosive condition.

Before use, store components under condition of -10°C to +40°C and humidity of 75% RH Max.

It is recommended to use components within 6 months after delivery