High Frequency Temperature Compensation Attenuator 18~36GHz 50Ω 100mW

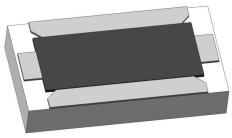
Part No. Descriptions

****	**	**	**	*	***	*
Series	**Frequency**	**Attenuation**	**Temperature Coefficient Code**	**Frequency Range Code**	**Metallization Options**	**Termination Plating Options**
KTCA	(36)	(02 to 06) 2dB to 6dB	(N3 to N7)		SMT	(no code)=lead free or (S)=Lead(Pb)

Number Code	Frequency Range (GHz)
5	18-27
6	27-36

Part No.	Frequency Range Code	Attenuation (dB)	Temperature Coefficient Code	Temperature Coefficient of Attenuation (dB/dB/℃)	Typ. VSWR (:1) @25℃	Max. Input Power (mW)	Attenuation Accuracy (dB)
KTCA3602N*SMTS	18~36	2	N3~N7	-0.003~ -0.007	1.50	100	±1.0
KTCA3603N*SMTS	18~36	3	N3~N7	-0.003~ -0.007	1.50	100	±1.0
KTCA3604N*SMTS	18~36	4	N3~N7	-0.003~ -0.007	1.50	100	±1.0
KTCA3605N*SMTS	18~36	5	N3~N7	-0.003~ -0.007	1.50	100	±1.0
KTCA3606N*SMTS	18~36	6	N3~N7	-0.003~ -0.007	1.50	100	±1.0

General Specifications



1. Frequency Range 18 to 27GHz
2. Attenuation 2dB
3. Attenuation Accuracy at 25℃ ±1.0dB Typical
4. VSWR at 25℃ 1.50:1 Typical
5. Nominal Impedance 50 Ohms
6. Power Rating 100 mW CW
7. Power Derating 100% @ 100℃
   Derates to 0% @ 150℃
8. Operating Temperature -55℃ to +150℃
9. Temperature Coefficient over Operating Temperature Range: See Table Above.
   Temperature Coefficient Tolerance: ±0.001dB/dB/℃.
10. Substrate: Alumina (Al_2O_3)
11. Resistive material: Thick film
12. Terminal material: Thick Film，Nickel Barrier, Sn/Pb Solder Plated
13. Protective Coating: Thick film (ethyl acetate)
14. Package Outline: See Sheet 3.
15. Workmanship: per MIL-PRF-55342.
16. RoHS Compliant.
17. Electrostatic Discharge Control: per MIL-STD-1686.

Unit Marking

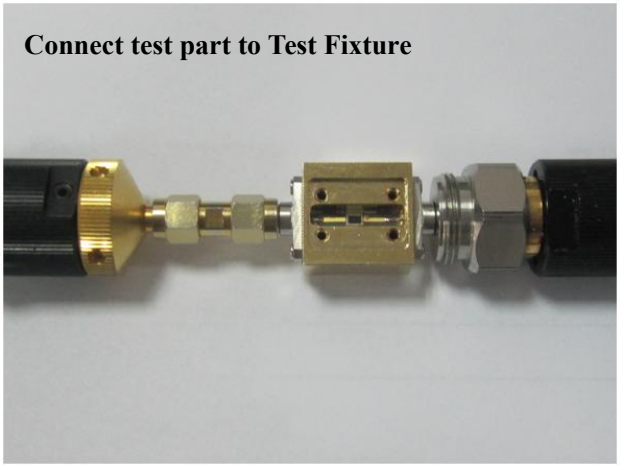
dB Value (XX), Direction of Shift (N) and TCA Shift (X).
Legibility and Permanency: per MIL-STD-130.

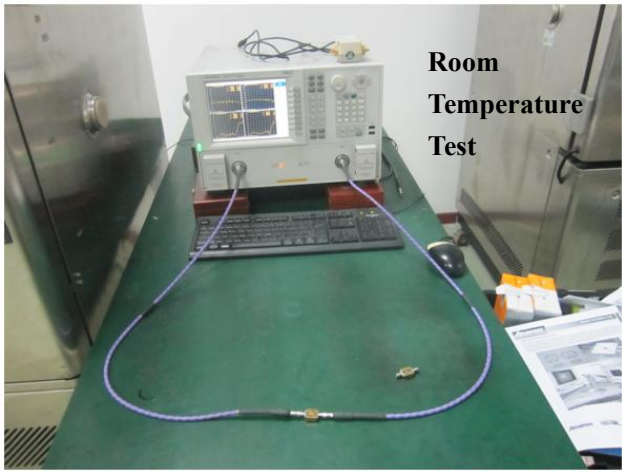
Quality Assurance

1. Sample inspect per ANSI/ASQC Z1.4 general inspection, LEVEL II, AQL = 1.0.
   1.1 Visual and mechanical examination for conformance to outline package requirements.
2. Select five (5) Units from lot measure attenuation from 18 to 36GHz every 20°C over the temperature range -55°C to +125°C.
   2.1 Calculate, using linear regression, the slope of the curve.
   2.2 Calculate TCA using the following formula: TCA = Slope / Attenuation @ 25°C.
3. Test data required for customer.

Yantel Corporation
Add：3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China
Tel：86-755-8355-1886 Fax：86-755-8355-2533
For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

Notes on RF Testing and Circuit Layout





1、 S2P documents are available for download

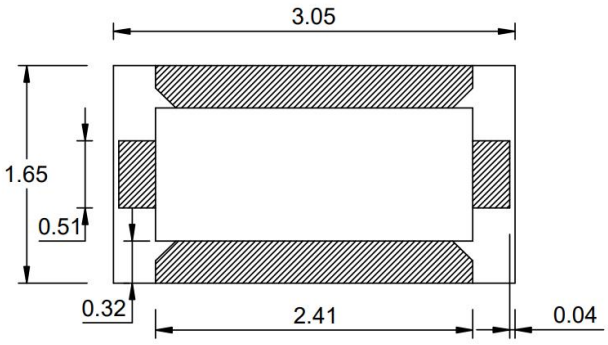
2、 18-36GHz test fixture is rentable（only for Chinese customers），otherwise please purchase them.

For any questions or needs, please feel free to contact inform@yantel-corp.com.

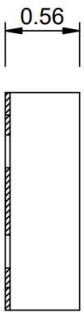
Package Outlines

All dimensions shown in mm unless stated otherwise
Note: Dimension tolerance in ±0.10 otherwise mention.

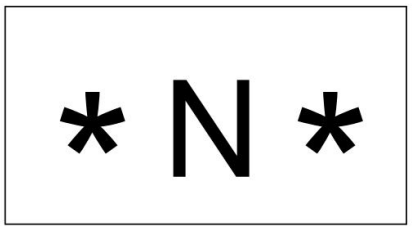
Unit: mm



TOP

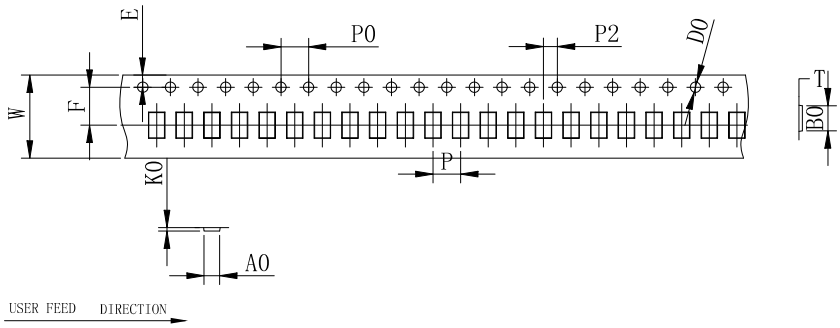


SIDE



Tape & Reel Drawing

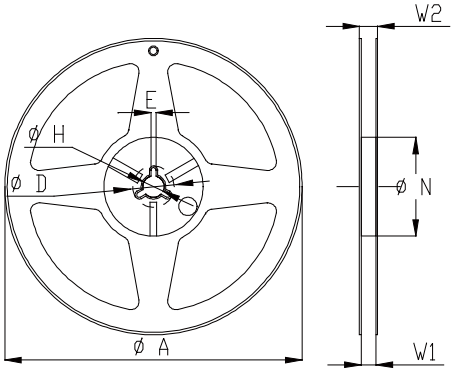
All dimensions shown in mm unless stated otherwise



Remarks:

1>Total tolerance of any 10 sprocket holes is ≤+/-0.20mm.
2>The thickness is measured on the margin of carrier tape.
3>Carrier camber should be not more than 1mm per 100mm through a length of 250mm.
4>The tolerance which is not marked is +/-0.1mm
5>AO,BO are measured from 0.3mm above the bottom of the cavity. KO refers to the inside depth.
6>The angle R which is not marked on the cavity is 0.2-0.3.
7>Draft angle which is not marked is 3°.
8>25 m/reel; 6000 units (maximum) / T&R

symbol	A0	B0	K0	P0	P	P2
spec	1.85±0.1	3.2±0.1	0.6±0.1	4.0±0.1	4.0±0.1	2.0±0.1
symbol	W	T	E	F	D0	
spec	12.0±0.3	0.3±0.05	1.75±0.1	5.5±0.1	$\Phi 1.5^{+0.1}_{-0.0}$	



Symbol	Dimensions(mm)
A	180+0/-3
N	60+1/-0
W1	12.0±0.3
W2	14±1.0
D	25±0.8
H	13±0.2
E	3±0.5