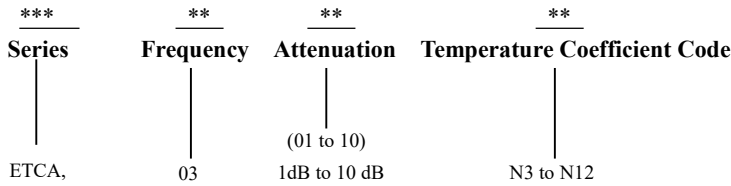


Part No. Descriptions


Part No.	Frequency Range (GHz)	Attenuation (dB)	Temperature Coefficient Code	Temperature Coefficient of Attenuation (dB/dB/°C)	Max. VSWR (:1) @1GHz@25°C	Max. Input Power (W)	Attenuation Accuracy (dB)
ETCA0303N*	DC-3	3	N10~N16	-0.010~-0.016	1.30	2	±0.5
ETCA0604N*	DC-3	4	N10~N16	-0.010~-0.016	1.30	2	±0.5
ETCA0605N*	DC-3	5	N10~N16	-0.010~-0.016	1.30	2	±0.5
ETCA0606N*	DC-3	6	N10~N16	-0.010~-0.016	1.30	2	±0.5

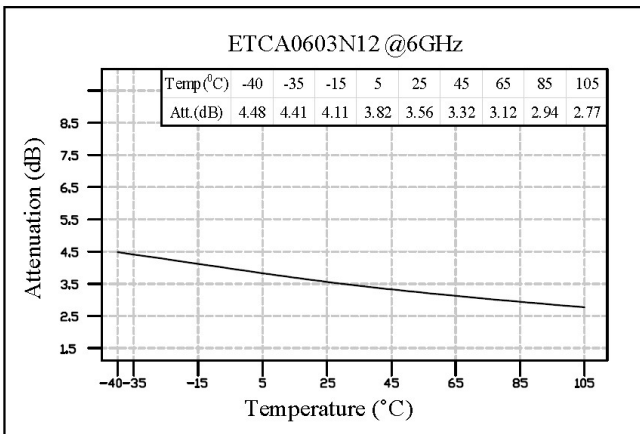
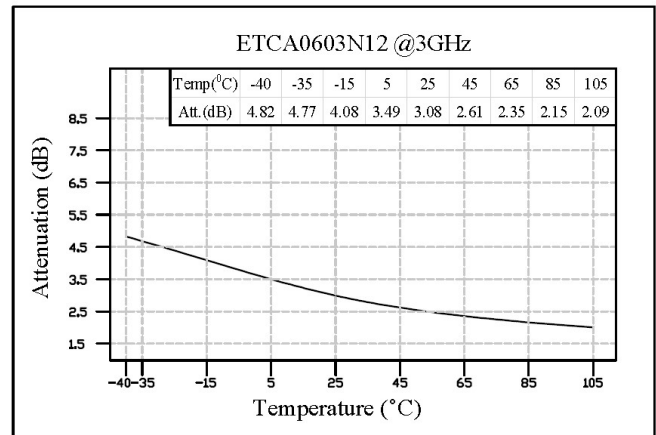
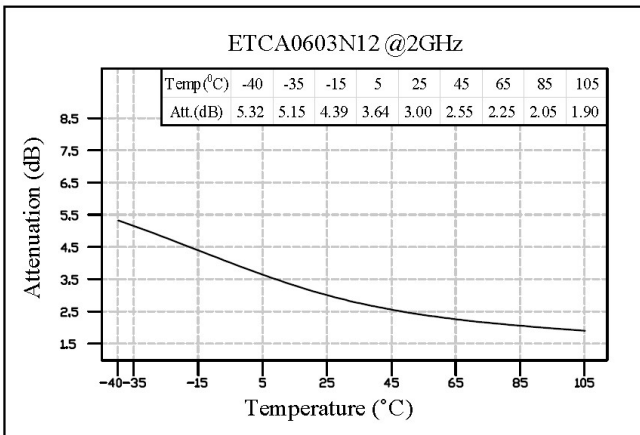
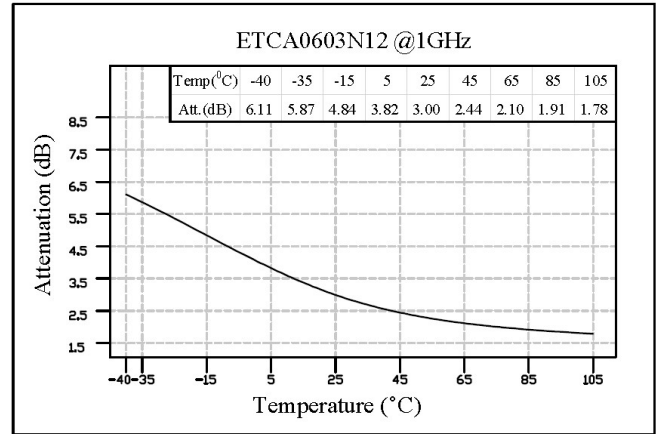
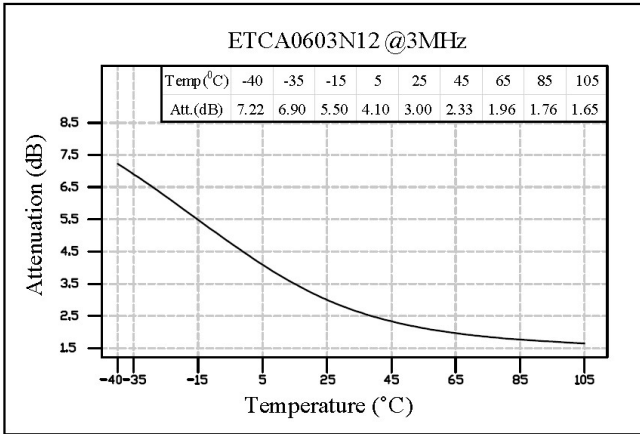
General Specifications

1. Frequency Range DC to 3GHz
2. Attenuation 3dB
3. Attenuation Accuracy at 25°C ±0.5dB@1GHz
4. VSWR 1.30:1 Max. @1GHz, 1.30:1 Max.@2GHz at 25°C
5. Nominal Impedance 50 Ohms
6. Power Rating 2 Watts CW
7. Power Derating 100% @ 125°C
Derates to 0% @ 150°C
8. Operating Temperature -55°C to +150°C
9. Temperature Coefficient over Operating Temperature Range: See Table Above.
Temperature Coefficient Tolerance: ±0.001dB/dB/°C.
10. Substrate: Alumina (Al₂O₃)
11. Resistive material: Thick film
12. Terminal material: Thick film, Nickel barrier with pure tin plate (lead free) or with tin (Sn90) plate (10% lead contained)
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 DC to 6 GHz every 20°C over the temperature range -35°C to +105°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.

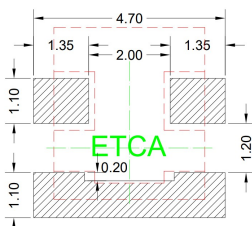
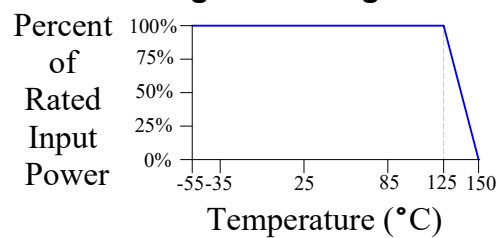
TCA Response


Statistical Table of Attenuation(typ.) VS Temperature

ATT(dB) \ Temp(°C)	3MHz	1GHz	2GHz	3GHz
-40	7.22	6.11	5.32	4.82
-35	6.90	5.87	5.15	4.77
-15	5.50	4.84	4.39	4.08
5	4.10	3.82	3.64	3.49
25	3.00	3.00	3.00	3.08
45	2.33	2.44	2.55	2.61
65	1.96	2.10	2.25	2.35
85	1.76	1.91	2.05	2.15
105	1.65	1.78	1.90	2.09

Recommended Layout

All dimensions shown in mm unless stated otherwise


Power Rating & Derating Curve


Yantel Corporation

Add: No.308-322, 3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China

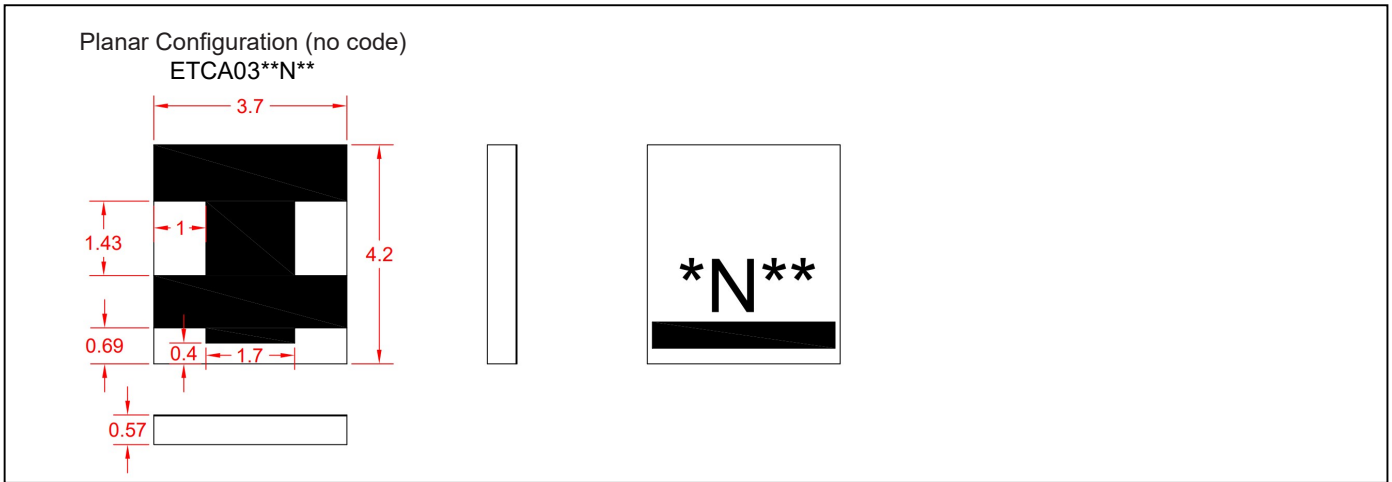
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

 For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

Package Outlines

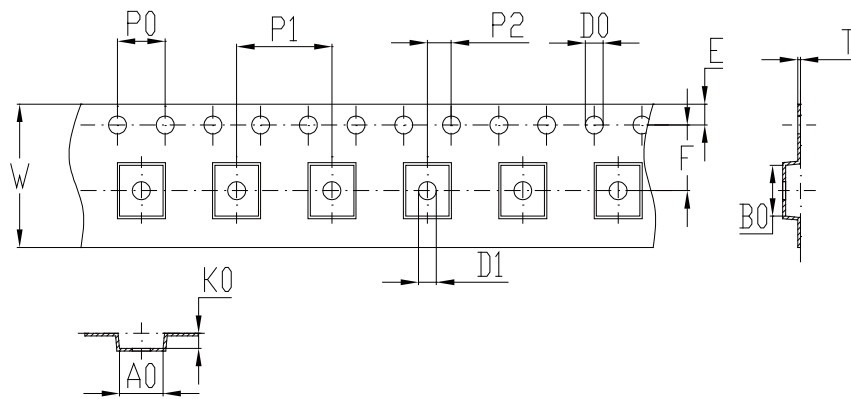
All dimensions shown in mm unless stated otherwise

Note: Dimension tolerance in ± 0.10 otherwise mention. * represents number



Tape & Reel Drawing

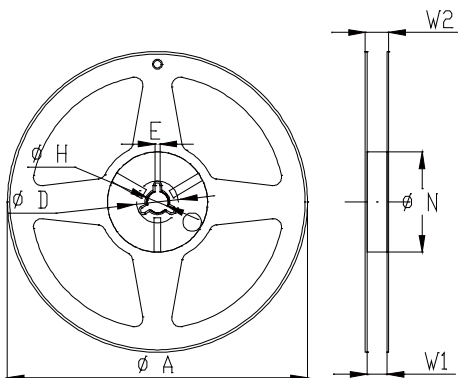
All dimensions shown in mm unless stated otherwise



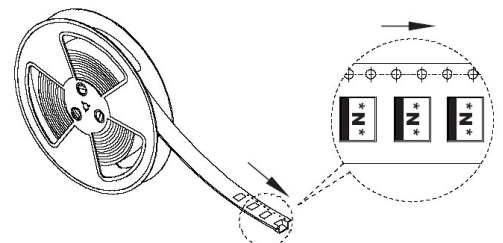
Notice:

- A. 10 Sprocket hole pitch cumulative tolerance is 0.2mm.
- B. Carrier camber shall be not more than 1mm per 100mm through a length of 250mm.
- C. All dimensions meet EIA-418-B requirements.
- D. A0 & B0 measured as indicated.
- E. K0 measured from a place on the inside bottom of the pocket to top surface of carrier.
- F. Material: PE 100
- G. Thickness: 0.23 ± 0.05 mm
- H. 1500 units (maximum) / T&R

symbol	A0	B0	K0	P0	P1	P2
spec	3.65 ± 0.1	4.25 ± 0.1	1.25 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	2.0 ± 0.1
symbol	W	T	E	F	D0	D1
spec	12.0 ± 0.3	0.23 ± 0.05	1.75 ± 0.1	5.5 ± 0.1	$\Phi 1.5^{+0.1}_{-0.0}$	$\Phi 1.5$ min



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



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