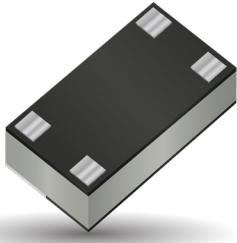


Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816 Series



ITF TECHNOLOGY

The ITF LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly. The ITF Coupler is offered in a variety frequency bands compatible with various types of high frequency wireless systems.

APPLICATIONS

- Defense Applications
- UHF/VHF Radios
- Handheld Systems
- Radar
- Commercial Aerospace
- Base Station

FEATURES

- Small size: 2816
- Band: (see Part Numbers)
- Characteristic impedance: 50Ω
- Operating / Storage temp: -40°C - +105°C
- Low profile
- Rugged construction
- RoHS compliant

HOW TO ORDER

CP	2816	A	XXXX	A	N	TR
Series	Case Size	Type	Frequency (MHz)	Sub-Type	LGA Termination	Taped & Reeled Lead Free

QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R , 4 hours

POWER HANDLING

20W (Continuous)

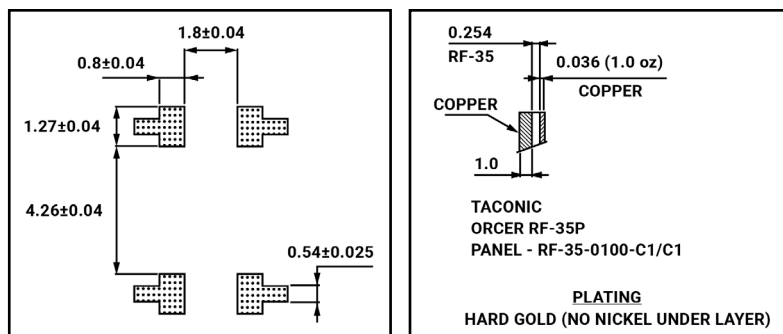
TERMINATION

Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

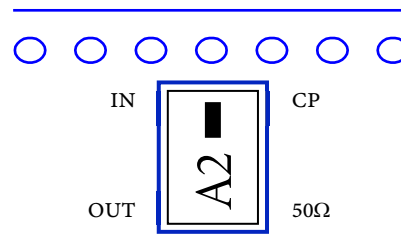
ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0281ANTR	225 - 337	-10 ± 2	-0.9	1.3	-14
CP2816A0368ANTR	225 - 512	-15 ± 4	-0.85	1.3	-14
CP2816A0424ANTR	337 - 512	-10 ± 2	-0.9	1.3	-14
CP2816A0540ANTR	480 - 600	-10 ± 1.2	-0.9	1.3	-14
CP2816A0615ANTR	480 - 750	-15 ± 2	-0.8	1.3	-14
CP2816A0675ANTR	600 - 750	-10 ± 1.2	-0.8	1.3	-14

PAD AND PCB RECOMMENDATION (TOP VIEW)



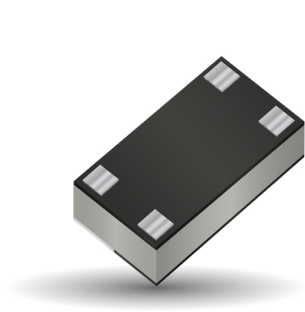
ORIENTATION IN TAPE (TOP VIEW)



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0281ANTR



ITF TECHNOLOGY
 The ITF LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly. The ITF Coupler is offered in a variety frequency bands compatible with various types of high frequency wireless systems.

- APPLICATIONS**
- Defense Applications
 - UHF/VHF Radios
 - Handheld Systems
 - Radar
 - Commercial Aerospace
 - Base Station

- FEATURES**
- Small size: 2816
 - Band: 225 - 337 MHz
 - Characteristic impedance: 50Ω
 - Operating / Storage temp: -40°C - +105°C
 - Low profile
 - Rugged construction
 - RoHS compliant

HOW TO ORDER

CP	2816	A	0281	A	N	TR
Series	Case Size	Type	Frequency (MHz)	Sub-Type	LGA Termination	Taped & Reeled Lead Free

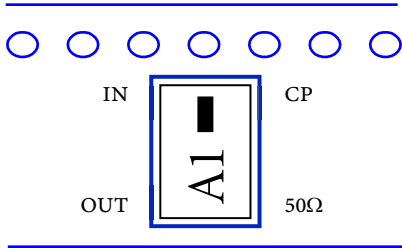
QUALITY INSPECTION
 Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

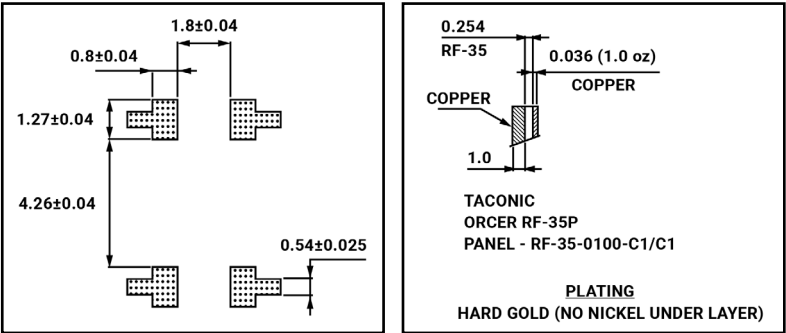
TERMINATION
 Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

POWER HANDLING
 20W (Continuous)

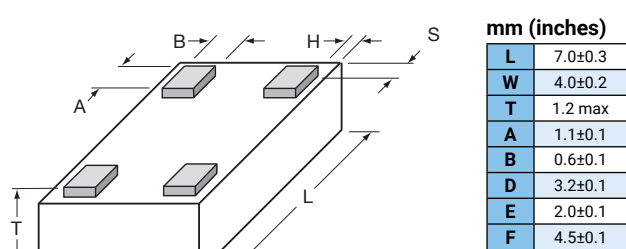
ORIENTATION IN TAPE (TOP VIEW)



PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



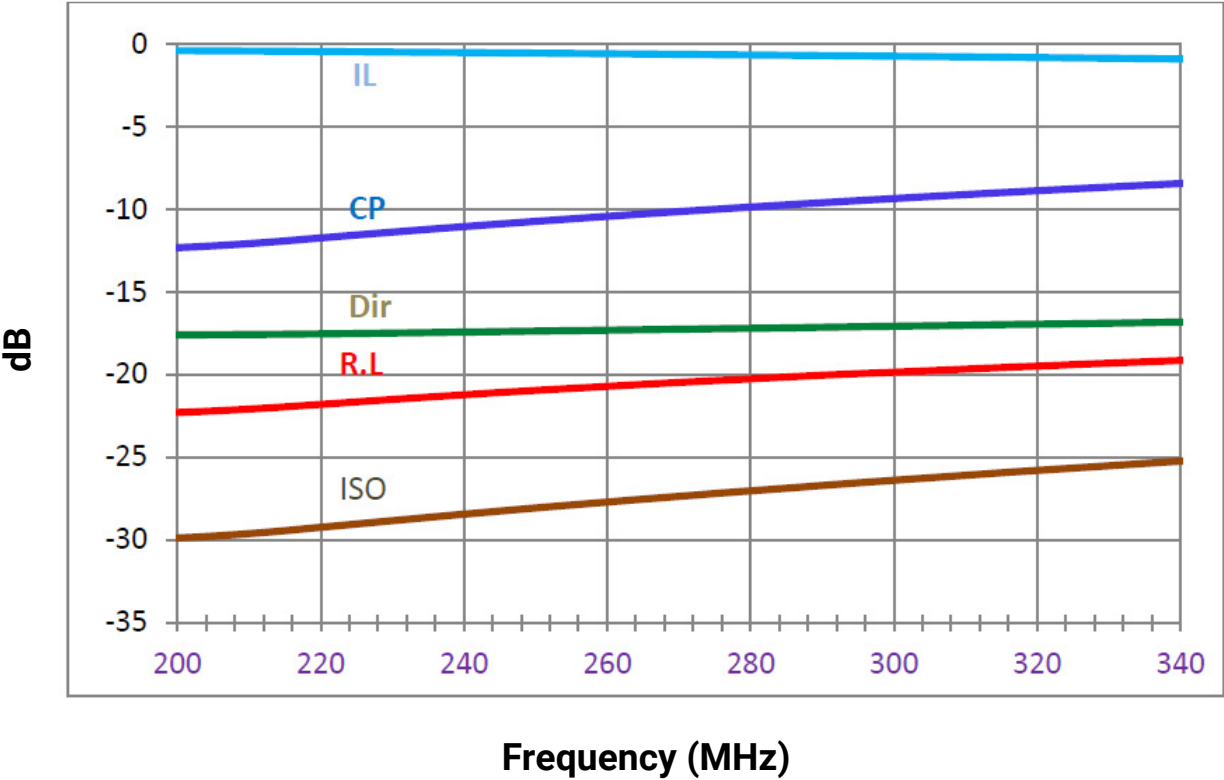
Thin-Film RF/Microwave Directional Couplers
High Directivity Directional Coupler
CP2816A0281ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0281ANTR	225 - 337	-10 ± 2	-0.9	1.3	-14

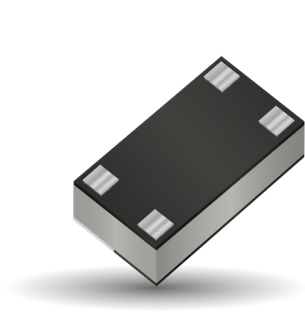
TYPICAL ELECTRICAL PERFORMANCE



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0368ANTR



ITF TECHNOLOGY
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- APPLICATIONS**
- Defense Applications
 - UHF/VHF Radios
 - Handheld Systems
 - Radar
 - Commercial Aerospace
 - Base Station

- FEATURES**
- Small size: 2816
 - Band: 225 - 512 MHz
 - Characteristic impedance: 50Ω
 - Operating / Storage temp: -40°C - +105°C
 - Low profile
 - Rugged construction
 - RoHS compliant

HOW TO ORDER

CP

T

Series

2816

T

Case Size

A

T

Type

0368

T

Frequency (MHz)

A

T

Sub-Type

N

T

LGA Termination

TR

T

Taped & Reeled Lead Free

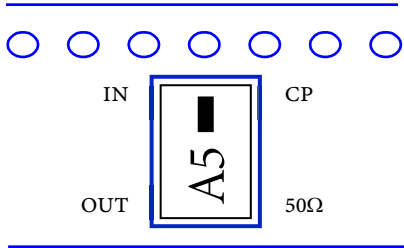
QUALITY INSPECTION
 Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

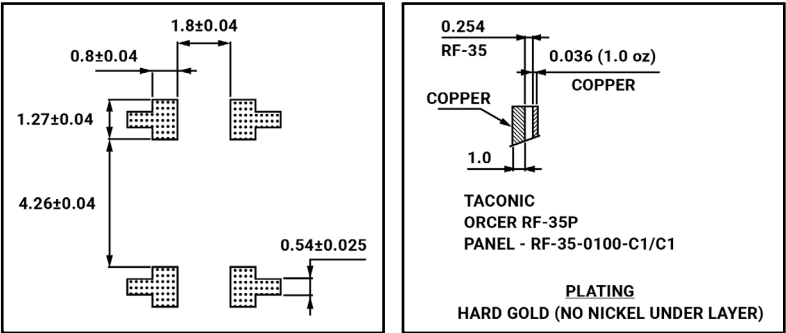
TERMINATION
 Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

POWER HANDLING
 20W (Continuous)

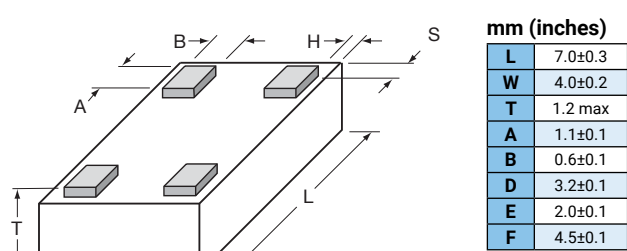
ORIENTATION IN TAPE (TOP VIEW)



PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

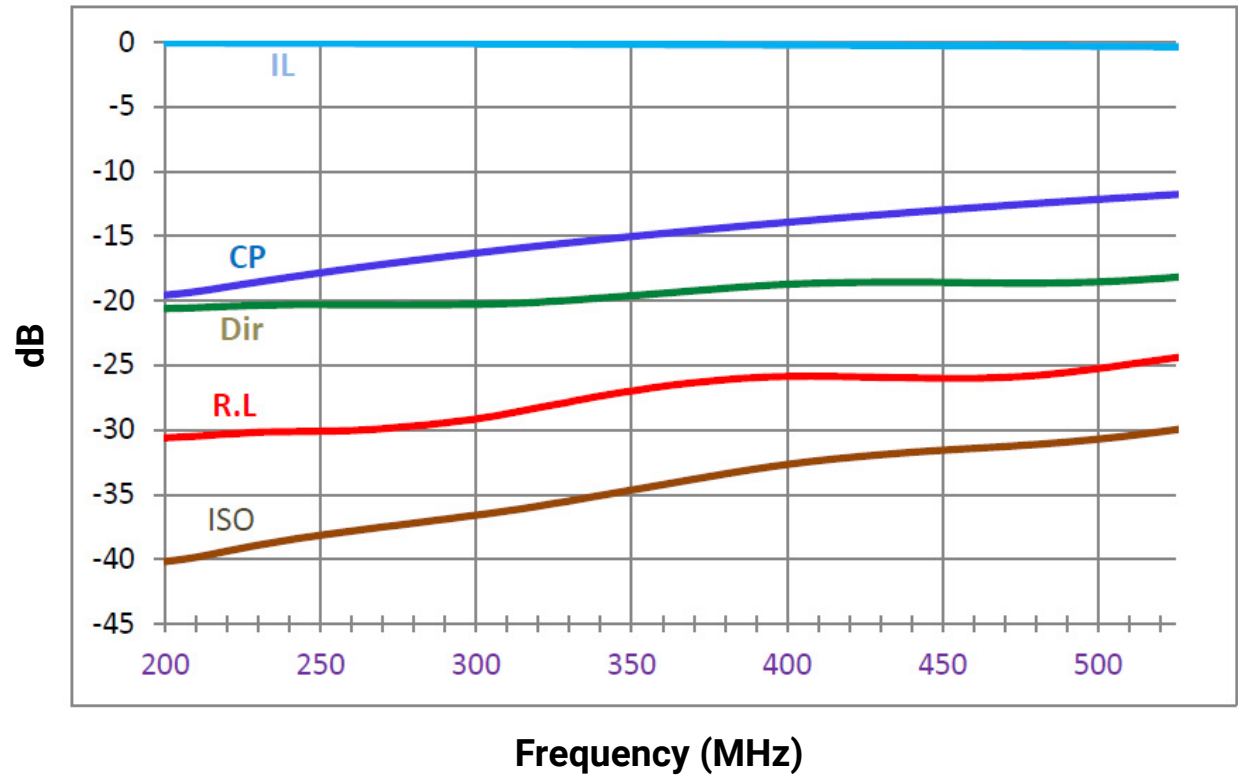
CP2816A0368ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0368ANTR	225 - 512	-15 ± 4	-0.85	1.3	-14

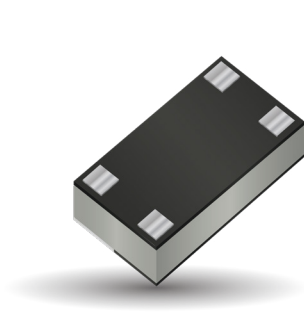
TYPICAL ELECTRICAL PERFORMANCE



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0424ANTR



ITF TECHNOLOGY
 The ITF LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly. The ITF Coupler is offered in a variety frequency bands compatible with various types of high frequency wireless systems.

- APPLICATIONS**
- Defense Applications
 - UHF/VHF Radios
 - Handheld Systems
 - Radar
 - Commercial Aerospace
 - Base Station

- FEATURES**
- Small size: 2816
 - Band: 337 - 512 MHz
 - Characteristic impedance: 50Ω
 - Operating / Storage temp: -40°C - +105°C
 - Low profile
 - Rugged construction
 - RoHS compliant

HOW TO ORDER

CP

T

Series

2816

T

Case Size

A

T

Type

0424

T

Frequency (MHz)

A

T

Sub-Type

N

T

LGA Termination

TR

T

Taped & Reeled
Lead Free

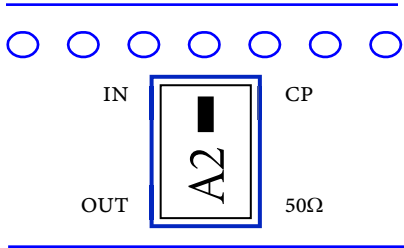
QUALITY INSPECTION
 Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

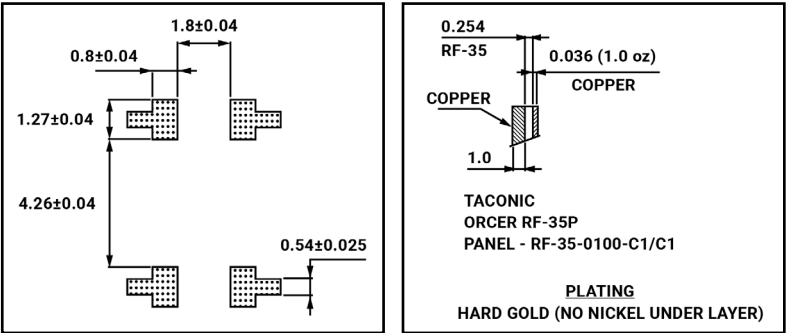
TERMINATION
 Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

POWER HANDLING
 20W (Continuous)

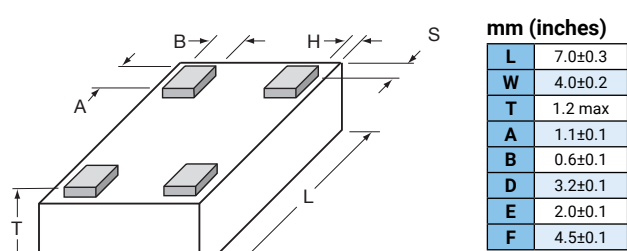
ORIENTATION IN TAPE (TOP VIEW)



PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

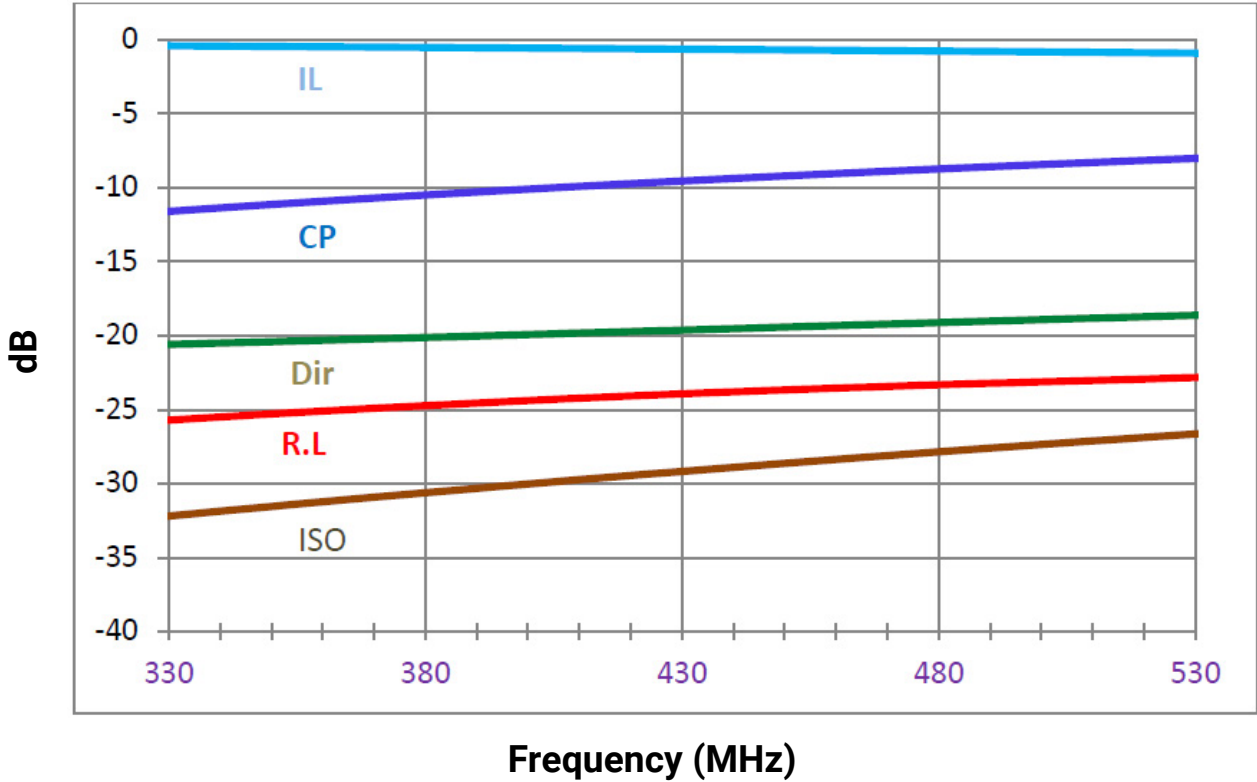
CP2816A0424ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0424ANTR	337 - 512	-10 ± 2	-0.9	1.3	-14

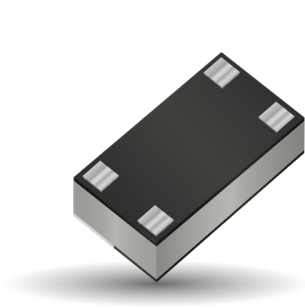
TYPICAL ELECTRICAL PERFORMANCE



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0540ANTR

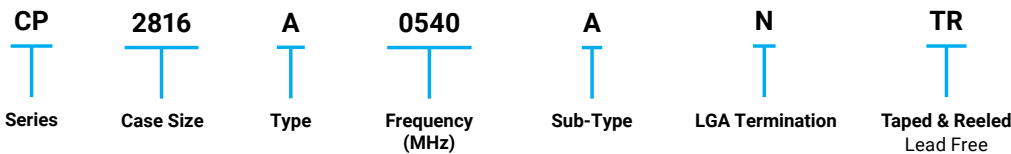


ITF TECHNOLOGY
 The ITF LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly. The ITF Coupler is offered in a variety frequency bands compatible with various types of high frequency wireless systems.

- APPLICATIONS**
- Defense Applications
 - UHF/VHF Radios
 - Handheld Systems
 - Radar
 - Commercial Aerospace
 - Base Station

- FEATURES**
- Small size: 2816
 - Band: 480 - 600 MHz
 - Characteristic impedance: 50Ω
 - Operating / Storage temp: -40°C - +105°C
 - Low profile
 - Rugged construction
 - RoHS compliant

HOW TO ORDER



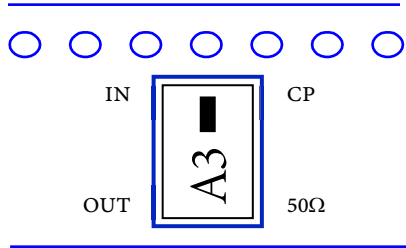
QUALITY INSPECTION
 Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

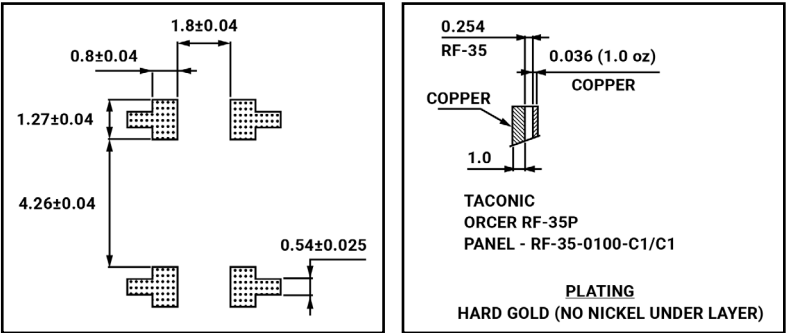
TERMINATION
 Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

POWER HANDLING
 20W (Continuous)

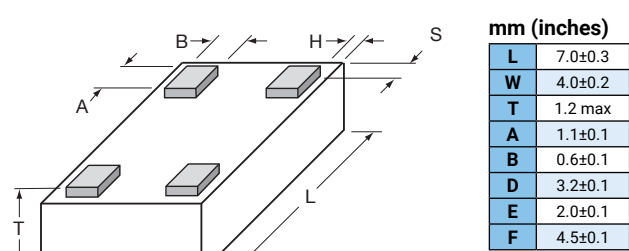
ORIENTATION IN TAPE (TOP VIEW)



PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



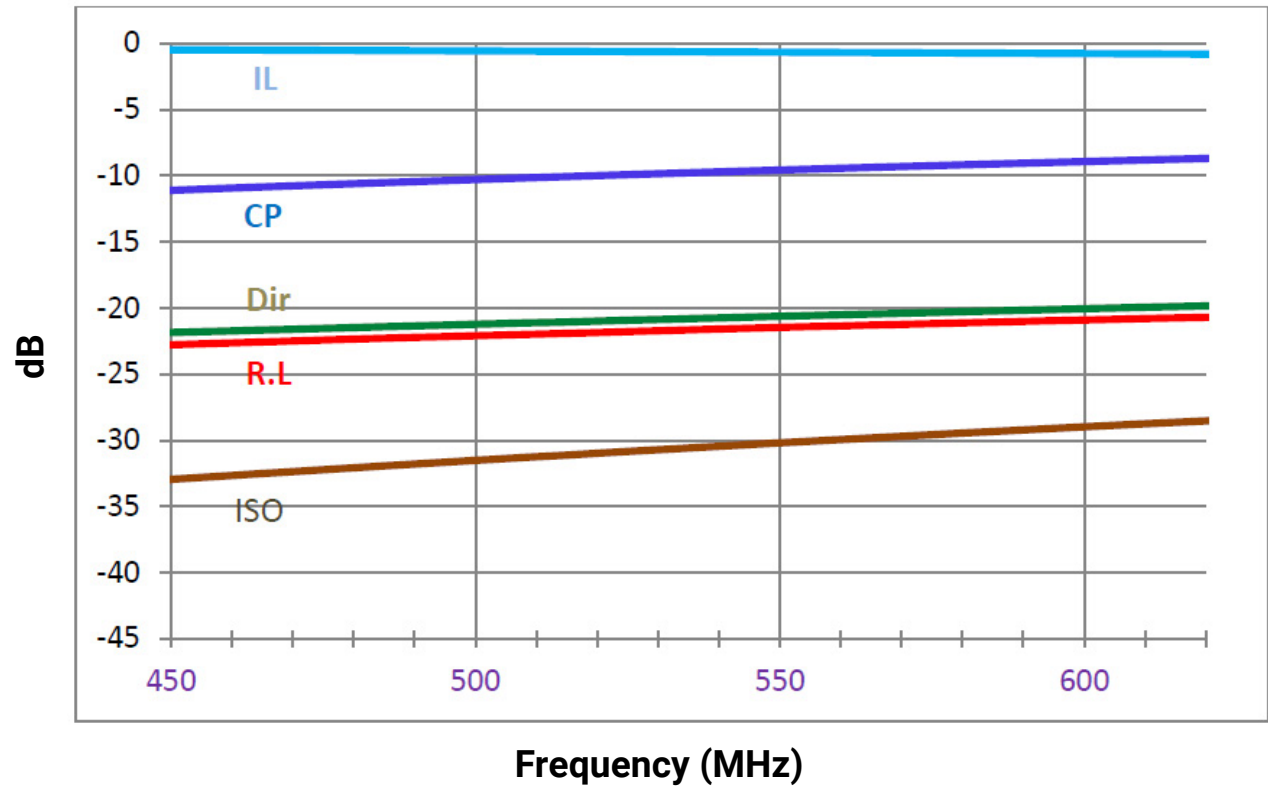
Thin-Film RF/Microwave Directional Couplers
High Directivity Directional Coupler
CP2816A0540ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0540ANTR	480 - 600	-10 ± 1.2	-0.9	1.3	-14

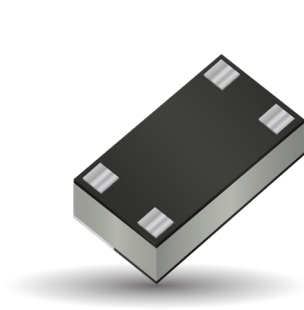
TYPICAL ELECTRICAL PERFORMANCE



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0615ANTR



ITF TECHNOLOGY
 The ITF LGA Coupler is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly. The ITF Coupler is offered in a variety frequency bands compatible with various types of high frequency wireless systems.

- APPLICATIONS**
- Defense Applications
 - UHF/VHF Radios
 - Handheld Systems
 - Radar
 - Commercial Aerospace
 - Base Station

- FEATURES**
- Small size: 2816
 - Band: 480 - 750 MHz
 - Characteristic impedance: 50Ω
 - Operating / Storage temp: -40°C - +105°C
 - Low profile
 - Rugged construction
 - RoHS compliant

HOW TO ORDER

CP
Series

2816
Case Size

A
Type

0615
Frequency (MHz)

A
Sub-Type

N
LGA Termination

TR
Taped & Reeled
Lead Free

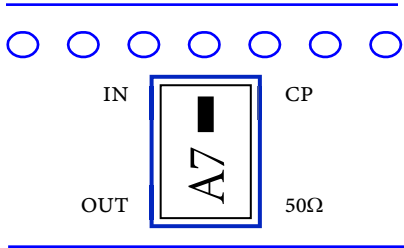
QUALITY INSPECTION
 Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

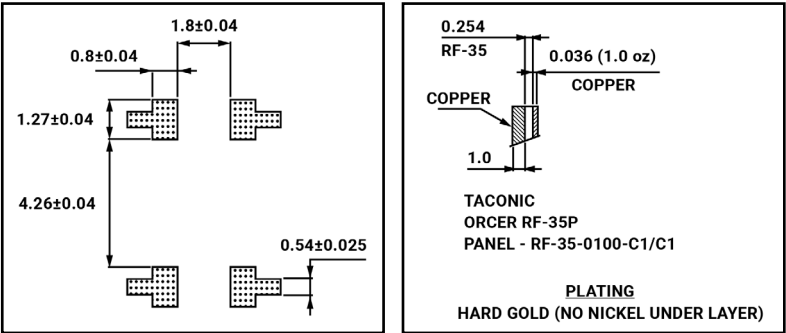
TERMINATION
 Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

POWER HANDLING
 20W (Continuous)

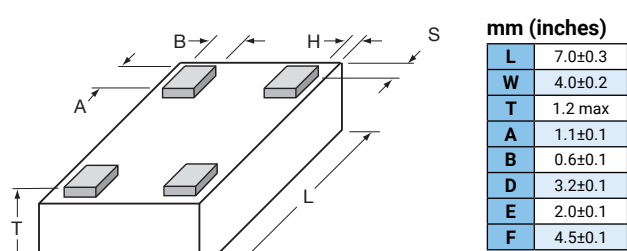
ORIENTATION IN TAPE (TOP VIEW)



PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

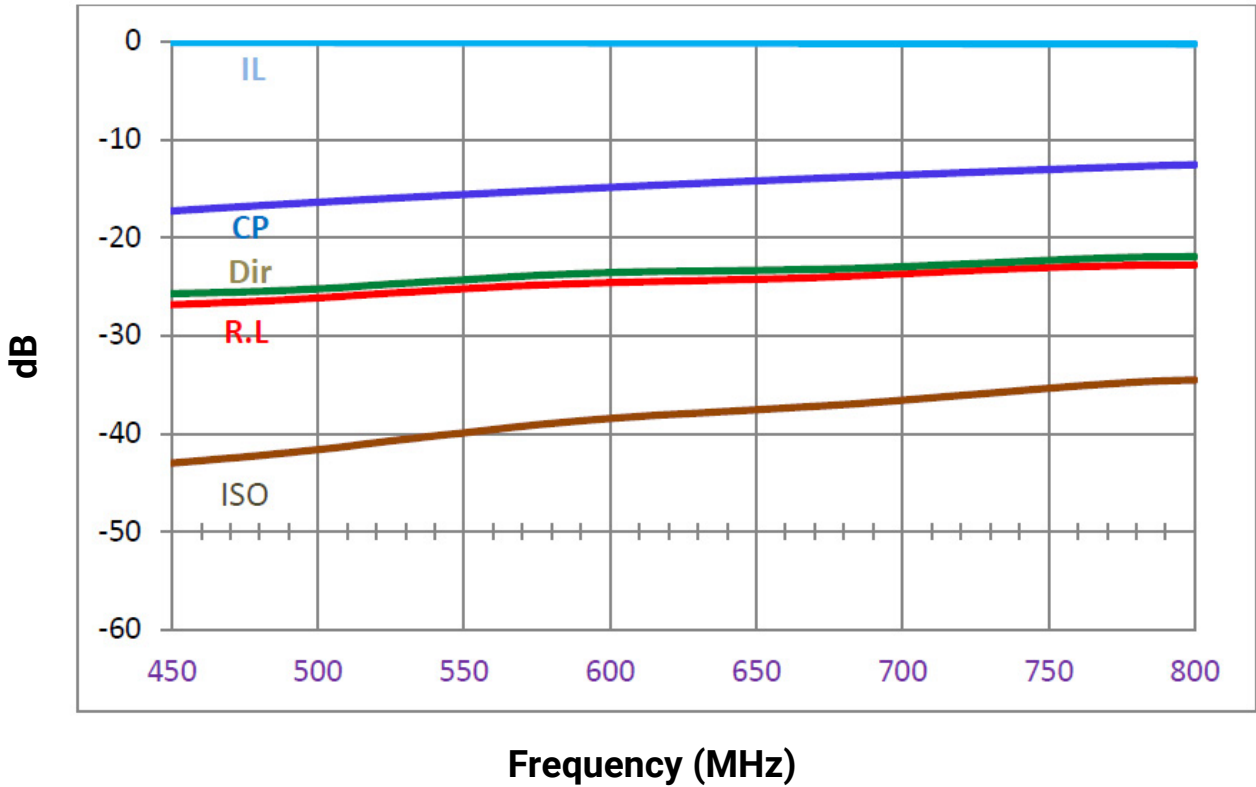
CP2816A0615ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0615ANTR	480 - 750	-15 ± 2	-0.8	1.3	-14

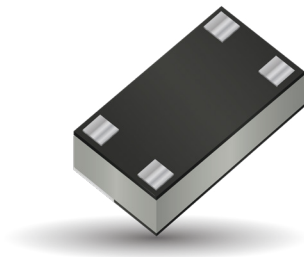
TYPICAL ELECTRICAL PERFORMANCE



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

CP2816A0675ANTR



ITF TECHNOLOGY

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APPLICATIONS

- Defense Applications
- UHF/VHF Radios
- Handheld Systems
- Radar
- Commercial Aerospace
- Base Station

FEATURES

- Small size: 2816
- Band: 600 - 750 MHz
- Characteristic impedance: 50Ω
- Operating / Storage temp: -40°C - +105°C
- Low profile
- Rugged construction
- RoHS compliant

HOW TO ORDER

CP
Series

2816
Case Size

A
Type

0675
Frequency (MHz)

A
Sub-Type

N
LGA Termination

TR
Taped & Reeled
Lead Free

QUALITY INSPECTION

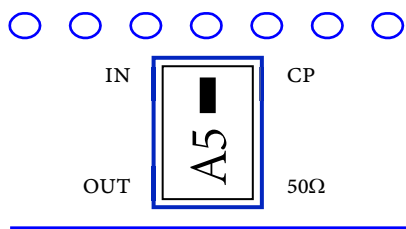
Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, I_R, 4 hours

TERMINATION

Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

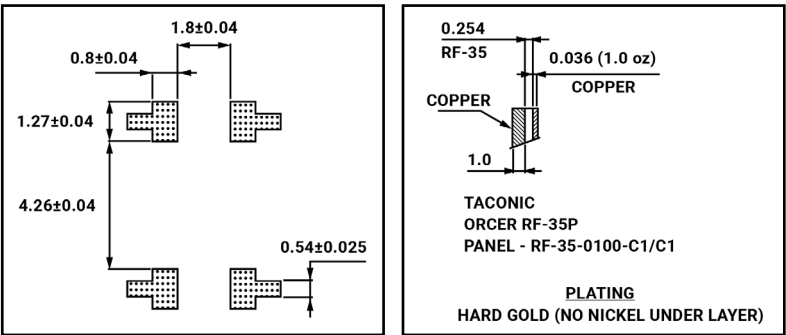
ORIENTATION IN TAPE (TOP VIEW)



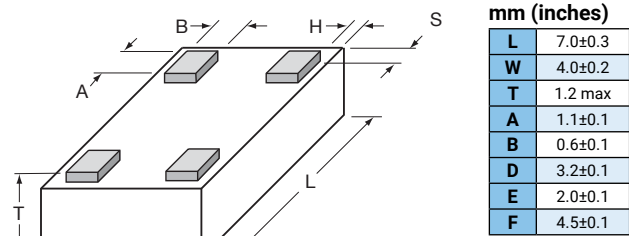
POWER HANDLING

20W (Continuous)

PAD AND PCB RECOMMENDATION (TOP VIEW)



DIMENSIONS



Thin-Film RF/Microwave Directional Couplers

High Directivity Directional Coupler

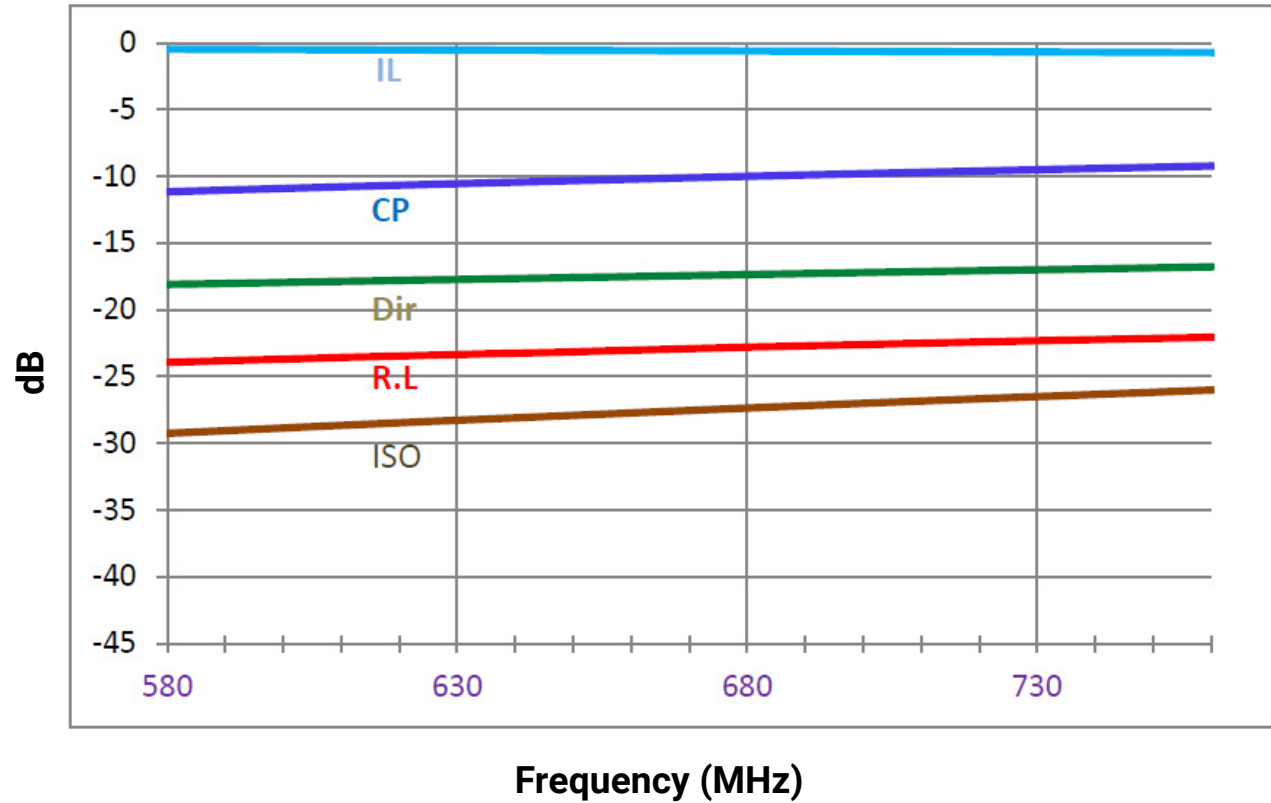
CP2816A0675ANTR



ELECTRICAL CHARACTERISTICS

Part Number	Frequency (MHz)	Coupling (dB)	Insertion Loss (dB)	V.S.W.R	Directivity (dB)
CP2816A0675ANTR	600 - 750	-10 ± 1.2	-0.8	1.3	-14

TYPICAL ELECTRICAL PERFORMANCE



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

KYOCERA AVX:

[CP2816A0281ANTR](#) [CP2816A0368ANTR](#) [CP2816A0424ANTR](#) [CP2816A0540ANTR](#) [CP2816A0615ANTR](#)
[CP2816A0675ANTR](#)