



## SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

**PE4401**

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG188-DS, RG316-DS
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Excellent VSWR of 1.21:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4401 SMA male connector with crimp/solder attachment for RG188-DS and RG316-DS is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 12.4 GHz and offers excellent VSWR of 1.21:1.

Our SMA male connector PE4401 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
VSWR			1.21:1	
Operating Voltage (AC)			335	Vrms

#### Mechanical Specifications

##### Size

Length	0.941 in [23.9 mm]
Width/Dia.	0.315 in [8.00 mm]
Weight	0.013 lbs [5.9 g]
Mating Torque	3 to 5 in-lbs [0.34 to 0.57 Nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4401](#)



SMA Male Connector Crimp/Solder Attachment  
for RG188-DS, RG316-DS

**RF Connectors**  
**Technical Data Sheet**

**PE4401**

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum
Crimp Sleeve	Brass	Nickel

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4401](#)

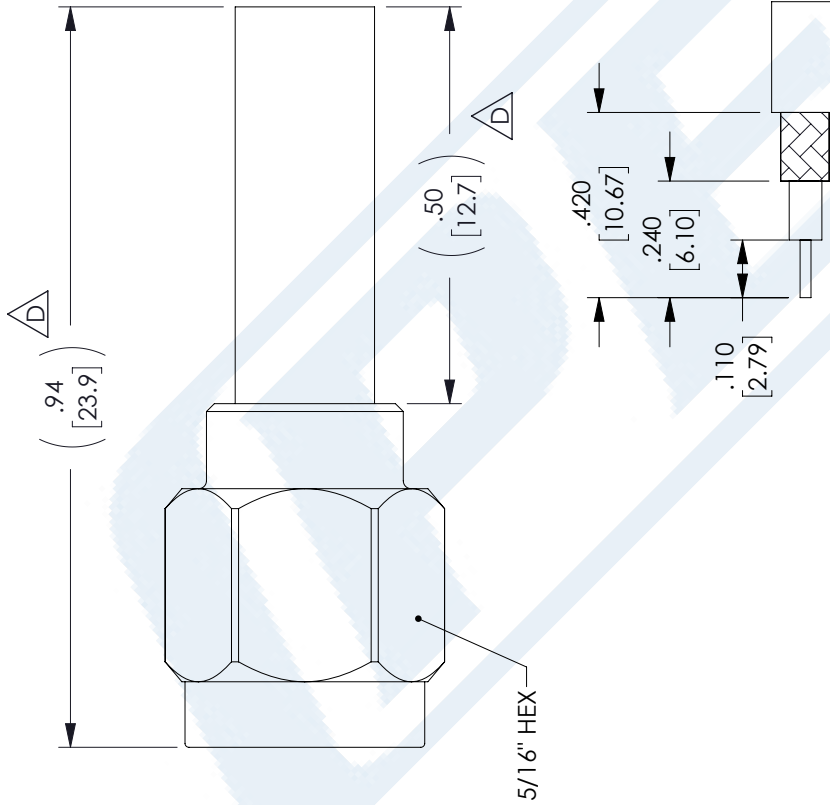
URL: <https://www.pasternack.com/sma-male-rg188-ds-rg316-ds-connector-pe4401-p.aspx>

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# PE4401 CAD Drawing

SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

REVISIONS		
REV.	DESCRIPTION	DATE
D	PCR PE4401 20220705; 94 WAS .87, ADDED .50 DIM.	06/03/2021
		AGANWANI



RECOMMENDED STRIPPING DIMENSIONS

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2	[5.08]	FRACTIONS
.XX = ±.02	[.51]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12	[305]	= +1 [25] / -0
12 [305] < L ≤ 60	[1524]	= +2 [51] / -0
60 [1524] < L ≤ 120	[3048]	= +4 [102] / -0
120 [3048] < L ≤ 300	[7620]	= +6 [152] / -0
300 [7620] < L		= +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

REV D

ITEM NO. PE4401

DRAWN BY DFRISIELLO

CAGE CODE A 53919

NOTES:  
CRIMP SIZES REQUIRED-  
CONTACT: SOLDER  
FERRULE: .151 [3.83] HEX CRIMP

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## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

PE45498

#### Configuration

- SSMC Plug Connector
- 50 Ohms

- Right Angle Body Geometry
- Connector Interface Types: RG316-DS, RG188-DS

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.62:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling

- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics
- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

#### Description

Pasternack's PE45498 SSMC plug right angle connector with crimp/solder attachment for RG316-DS and RG188-DS is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.62:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45498 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
VSWR			1.62:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](#)



SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

RF Connectors  
Technical Data Sheet

PE45498

**Mechanical Specifications**

<b>Size</b>	
Length	0.421 in [10.69 mm]
Width/Dia.	0.156 in [3.96 mm]
Height	0.33 in [8.38 mm]
Mating Cycles	500 Cycles
Mating Torque	1.75 to 2 in-lbs [0.20 to 0.23 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	Teflon	
Body	Brass	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45204
Crimp Sleeve	Brass	Gold MIL-G-45204

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-65 to +165 deg C
Shock	Method 213, Condition B, 75G @6ms @1/2 sine
Vibration	Method 204, Condition D (20G)
Salt Spray	Method 101, Condition B, 5% salt solution

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](#)



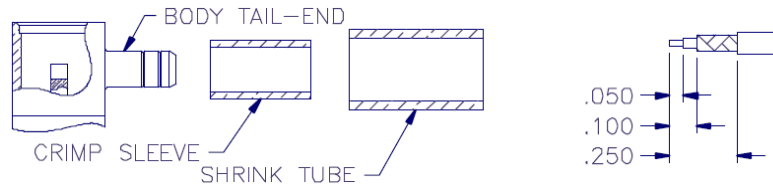
SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

RF Connectors  
Technical Data Sheet

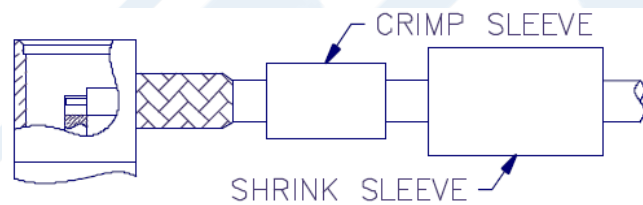
PE45498

Assembly Instruction

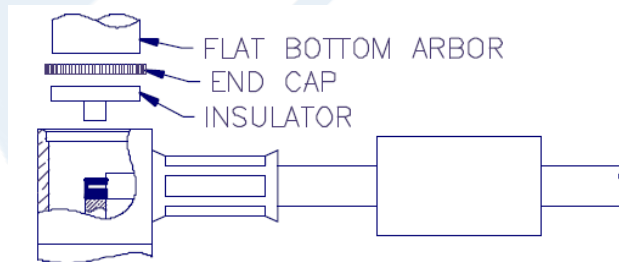
Assembly Instructions



1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](#)



## SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

PE45498

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE45498](https://www.pasternack.com/ssmc-plug-rg316-ds-rg188-ds-connector-pe45498-p.aspx)

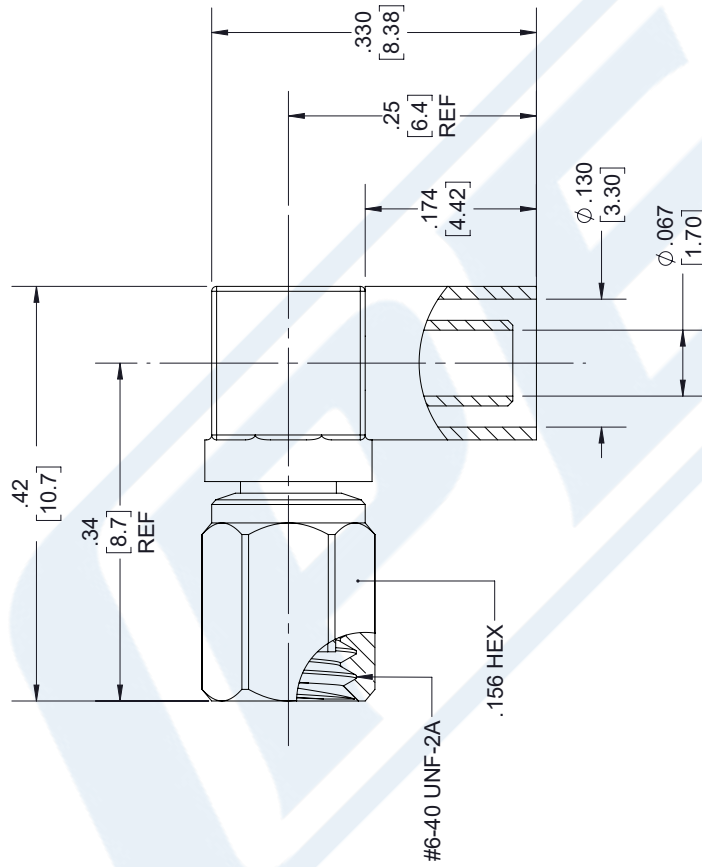
URL: <https://www.pasternack.com/ssmc-plug-rg316-ds-rg188-ds-connector-pe45498-p.aspx>

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# PE45498 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	09/04/19
		APPROVED
		S. ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
.XX±.01 [25]	±.132
.XXX±.005 [13]	±.132
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SHEET 1 OF 1  
SCALE N/A

REV A

PART NUMBER PE45498

DRAWN BY K.DANG

CAGE NUMBER A 53919

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## Flexible RG188 Coax Cable Double Shielded with White PTFE Jacket

### RF Cables Technical Data Sheet

RG188-DS

#### Configuration

- Flexible Cable
- 2 Shield(s)

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Nominal Capacitance		32 [104.99]		pF/ft [pF/m]

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.01	0.1	1	5	10	GHz
Attenuation, Typ	3.8	11.5	30	79	133	dB/100ft
	12.47	37.73	98.43	259.19	436.35	dB/100m
Input Power (CW), Max	1,250	450	160	57		Watts

#### Mechanical Specifications

Diameter	0.118 in [3 mm]
Weight	0.016 lbs/ft [0.02 Kg/m]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.02 in [0.51 mm]
Conductor Type	Stranded	
Dielectric	PTFE	0.06 in [1.52 mm]
First Shield	Silver Plated Copper Braid 90% coverage	0.078 in [1.98 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG188 Coax Cable Double Shielded with White PTFE Jacket RG188-DS](#)

Flexible RG188 Coax Cable Double  
Shielded with White PTFE Jacket

RF Cables Technical Data Sheet

RG188-DS

Second Shield	Silver Plated Copper Braid 90% coverage	0.096 in [2.44 mm]
Jacket	PTFE, White	0.118 in [3 mm]

**Environmental Specifications**

**Temperature**

Operating Range

-55 to +200 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

Flexible RG188 Coax Cable Double Shielded with White PTFE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

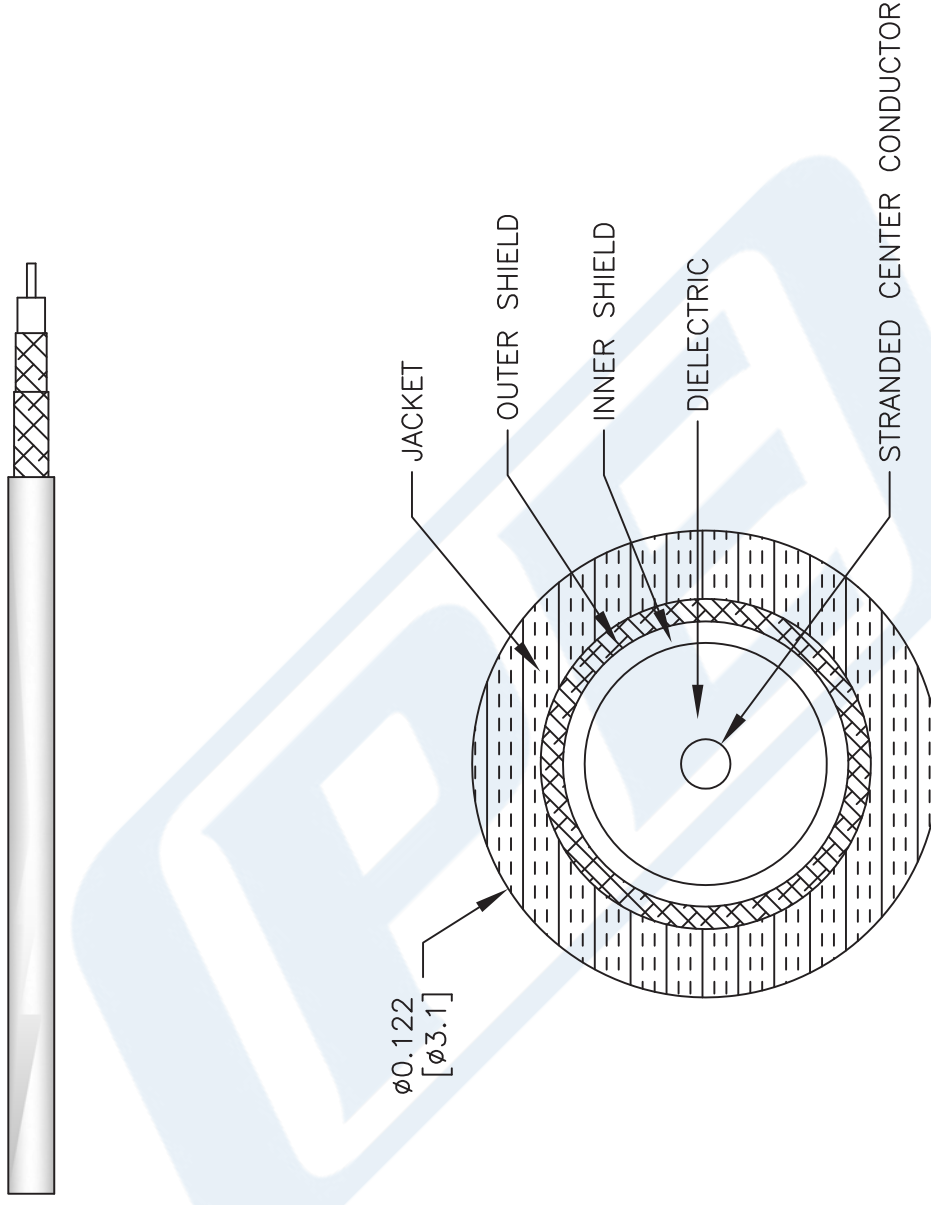
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG188 Coax Cable Double Shielded with White PTFE Jacket RG188-DS](#)

URL: <https://www.pasternack.com/flexible-0.122-rg188-ds-50-ohm-coax-cable-ptfe-jacket-rg188-ds-p.aspx>

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# RG188-DS CAD Drawing

Flexible RG188 Coax Cable Double Shielded with White PTFE Jacket



NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE	CAGE CODE	CAD FILE	SCALE	SIZE
<b>RG188-DS</b>	<b>53919</b>	062817	N/A	A

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