



QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45684

Configuration

- QMA Female Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- PIM levels lower than -155 dBc

- Silver Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies
- Wireless Communications
- Low PIM Applications

Description

Pasternack's PE45684 QMA female connector with solder/solder attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250 is part of our full line of RF components available for same-day shipping. Our QMA female connector operates up to a maximum frequency of 6 GHz. The QMA female connector also has low passive intermodulation of -155 dBc.

Our QMA female connector PE45684 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		6	GHz
Passive Intermodulation			-155	dBc
Dielectric Withstanding Voltage (AC)			750	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.2:1	1.3:1				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45684](#)



QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45684

Mechanical Specifications

Size

Length	0.826 in [20.98 mm]
Width/Dia.	0.35 in [8.89 mm]
Weight	0.02 lbs [9.07 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal
Body	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range	-40 to +155 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 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: [QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45684](#)

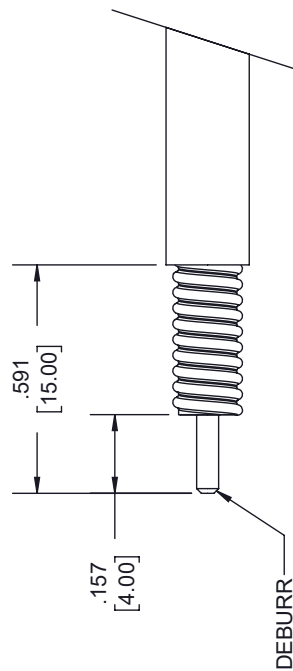
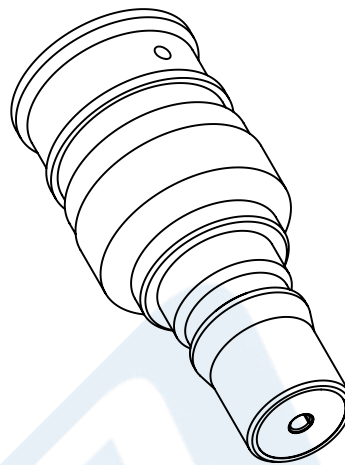
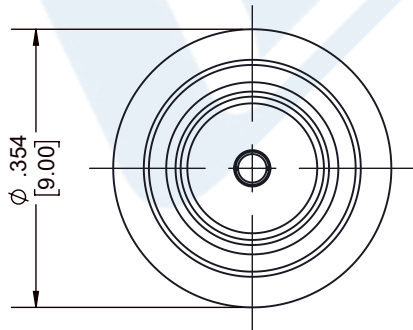
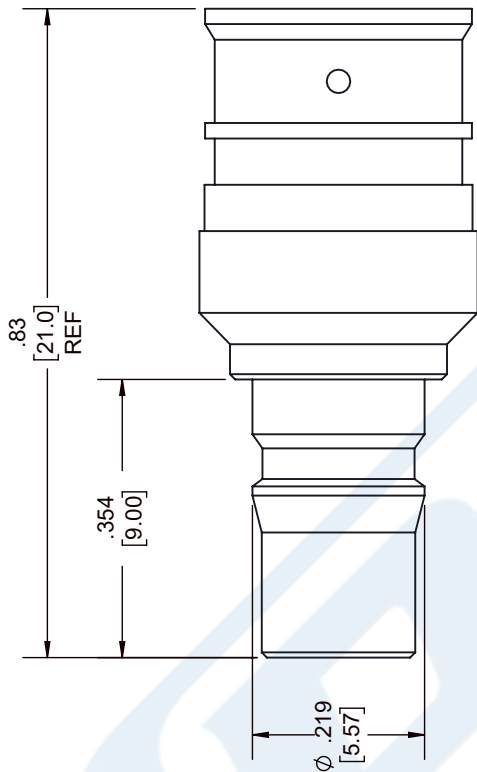
URL: <https://www.pasternack.com/qma-female-pe-1-4sfhc-spp-250-llpl-connector-pe45684-p.aspx>

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PE45684 CAD Drawing

QMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/18/2021	S. ELLIS



STRIPPING DIMENSIONS

NOTES:

1. CABLE ATTACHMENT:
• OUTER: SOLDER.
• INNER: SOLDER.

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

TOLERANCES:

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

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% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.



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SHEET 1 OF 1

SCALE N/A

REV A



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ITEM NO. PE45684

DRAWN BY K.DANG

CAGE CODE 53919

SIZE A

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4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

Configuration

- 4.1/9.5 Mini DIN Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact

Applications

- General Purpose Test
- Custom Cable Assemblies
- Wireless Communications
- Low PIM Applications

Description

Pasternack's PE45650 4.1/9.5 Mini DIN male connector with solder/solder attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250 is part of our full line of RF components available for same-day shipping. Our 4.1/9.5 Mini DIN male connector operates up to a maximum frequency of 6 GHz. The 4.1/9.5 Mini DIN male connector also has low passive intermodulation of -160 dBc.

Our 4.1/9.5 Mini DIN male connector PE45650 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		6	GHz
Passive Intermodulation			-160	dBc
Dielectric Withstanding Voltage (AC)			1,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3					GHz
VSWR, Max	1.15:1					

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45650](#)



4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

Mechanical Specifications

Size

Length	0.86 in [21.84 mm]
Width/Dia.	0.94 in [23.88 mm]
Weight	0.08 lbs [36.29 g]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal
O-Ring	Silicone	

Mechanical Specification Notes:
Interface Conforms to IEC61169-11

Environmental Specifications

Temperature

Operating Range	-40 to +155 deg C
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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: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250 PE45650](#)



4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45650

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 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: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45650](https://www.pasternack.com/4.1-9.5-mini-din-male-pe-1-4sfhc-spp-250-llpl-connector-pe45650-p.aspx)

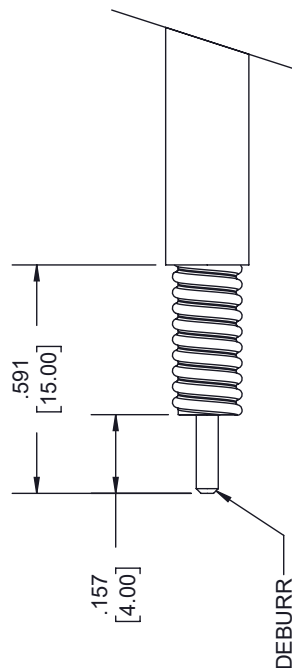
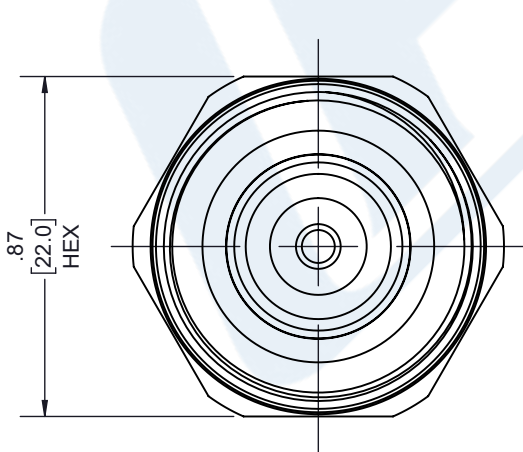
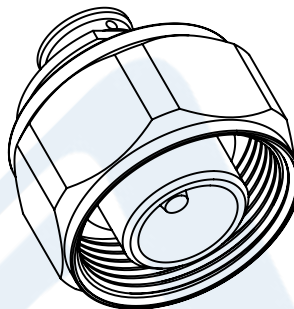
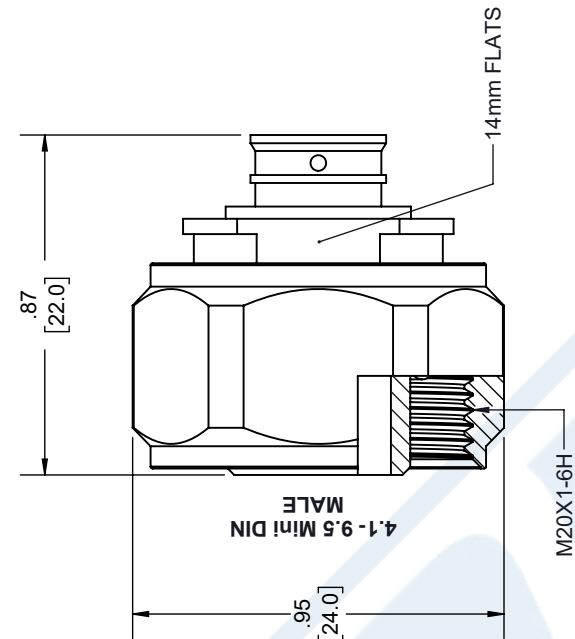
URL: <https://www.pasternack.com/4.1-9.5-mini-din-male-pe-1-4sfhc-spp-250-llpl-connector-pe45650-p.aspx>

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PE45650 CAD Drawing

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment
for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/8/2021	S. ELLIS



STRIPPING DIMENSIONS

NOTES:

- CABLE ATTACHMENT:
• OUTER: SOLDER.
• INNER: SOLDER.

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

TOLERANCES:	
.X = ±.2	[.508]
.XX = ±.02	[.51]
.XXX = ±.005	[.13]
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% / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	



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SHEET 1 OF 1

SCALE N/A

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SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE45650



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet


SPP-250-LLPL

Times Microwave Systems Coax Cable Specification Configuration

- Low Loss, Plenum Corrugated Cable

Features

- PIM < -160 dBc
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss
- Great Shielding >100 dB
- UV Resistant Jacket

Applications

- Distributed Antenna Systems (DAS)
- Plenum Installations
- Small Cells
- Multi-Carrier Communication Systems
- PIM Testing

Description

SPP-250-LLPL low loss plenum rated coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The SPP-250-LLPL coaxial cable features a low loss dielectric, solid copper center conductor and a helically corrugated, copper outer conductor. These features combine to make the Times Microwave SPP-250-LLPL an extremely flexible, low PIM coax cable that is well suited for Distributed Antenna Systems (DAS), plenum installations or small cells. The tough, FEP jacket provides moisture and UV protection.

Our datasheet specifications and drawing with dimensions for Times Microwave SPP-250-LLPL coax cable are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM feeder cable or simply create a custom cable assembly configuration, Pasternack has the right SPP-250-LLPL cable assemblies for the job.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		76		%
Shielding Effectiveness	100			dB
Passive Intermodulation			-160	dBc
Inner Conductor DC Resistance			3	Ohms/1000ft
Nominal Capacitance		27 [88.58]		pF/ft [pF/m]
Nominal Inductance		0.067 [0.22]		uH/ft [uH/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-250-LLPL](#)



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet


SPP-250-LLPL

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	1.9	2.3	4.9	5.8	GHz
Attenuation, Typ	3.8	8.1	9	13.5	14.8	dB/100ft
	12.47	26.57	29.53	44.29	48.56	dB/100m
Input Power (CW), Max	1,010	470	430	280	260	Watts

Mechanical Specifications

Diameter	0.28 in [7.11 mm]
Weight	0.072 lbs/ft [0.11 Kg/m]
Min. Bend Radius (Installation)	1.25 in [31.75 mm]
Bending Moment	0.8 lbs-ft [1.08 N-m]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strands	0.068 in [1.73 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.19 in [4.83 mm]
Outer Conductor	Copper Corrugated	0.25 in [6.35 mm]
Jacket	FEP, Blue	0.28 in [7.11 mm]

Environmental Specifications

Temperature Operating Range	-55 to +200 deg C
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-250-LLPL](#)



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet

**SPP-250-LLPL**

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

Plotted and Other Data

Notes:

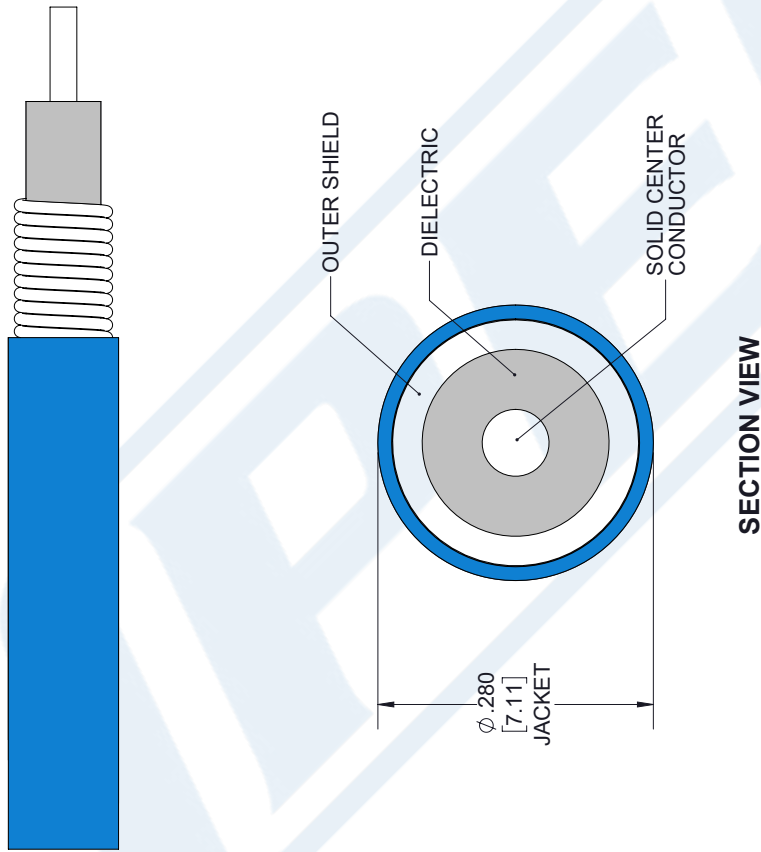
Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-250-LLPL](#)

URL: <https://www.pasternack.com/low-loss-corrugated-spp250llpl-fep-jacket-spp-250-llpl-p.aspx>

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TIMES MICROWAVE SYSTEMS **SPP-250-LLPL CAD Drawing**
 Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax
 Cable with Blue FEP Jacket Superflexible



STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PASTERNAK® THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com	DWG TITLE SPP-250-LLPL		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].	
	CAGE CODE 53919	CAD FILE 022118	SCALE N/A	SIZE A 7361