



## SMB Plug Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

**PE4080**

#### Configuration

- SMB Plug Connector
- MIL-STD-348A
- 50 Ohms

- Straight Body Geometry
- Connector Interface Types: RG178, RG196

#### Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.3:1
- Gold Plated Beryllium Copper Contact
- 30  $\mu$ in minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4080 SMB plug connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMB plug connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.3:1.

Our SMB plug connector PE4080 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		3	GHz
VSWR			1.3:1	
Operating Voltage (AC)			250	Vrms

#### Mechanical Specifications

Size	
Length	0.86 in [21.84 mm]
Width/Dia.	0.25 in [6.35 mm]
Weight	0.013 lbs [5.9 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Plug Connector Crimp/Solder Attachment for RG178, RG196 PE4080](#)



## SMB Plug Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4080

#### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 30 $\mu$ in minimum
Insulation	PTFE	
Body	Brass	Nickel 100 $\mu$ in minimum

#### Environmental Specifications

##### Temperature

Operating Range

-65 to +165 deg C

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

#### Plotted and Other Data

Notes:

SMB Plug Connector Crimp/Solder Attachment for RG178, RG196 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: [SMB Plug Connector Crimp/Solder Attachment for RG178, RG196 PE4080](#)

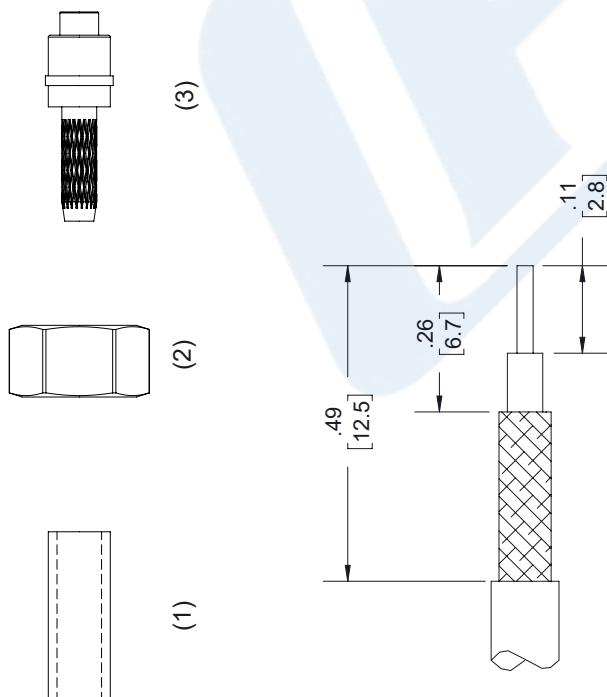
URL: <https://www.pasternack.com/smb-plug-standard-rg178-rg196-connector-pe4080-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE4080 CAD Drawing

SMB Plug Connector Crimp/Solder Attachment for RG178, RG196

REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
A	PCR PE4080 2020/09/21	10/22/20	SRAUTUS	



## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.  
TIN CENTER CONDUCTOR.
2. SLIDE FERRULE (1) & CLAMP NUT (2) OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY (3) UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR.  
SLIDE FERRULE (1) OVER BRAID & AGAINST CLAMP NUT.
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN USING 3~5 IN-LBS TORQUE.

## CRIMP SIZE REQUIRED

CONTACT: SOLDER

FERRULE: 100" HEX CRIMP TOOL

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	SHEET 1 OF 1	SCALE N/A
	ITEM NO. PE4080	REV A
	SIZE A	53919

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

TOLERANCES:

$X = \pm 2$  [5.08] FRACTIONS  
 $XX = \pm .02$  [.51]  $\pm 1/32$   
 $XXX = \pm .005$  [.13] ANGLES  $\pm 1^\circ$   
 CABLE LENGTH (L) TOLERANCES:  
 $L \leq 12$  [305] =  $+1 [25] / -0$   
 $12 [305] < L \leq 60 [1524] = +2 [51] / -0$   
 $60 [1524] < L \leq 120 [3048] = +4 [102] / -0$   
 $120 [3048] < L \leq 300 [7620] = +6 [152] / -0$   
 $300 [7620] < L = +5% / -0$   
 ALL DIMENSIONS SHOWN  
 ARE FOR REFERENCE ONLY.



## SSMB Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45195

#### Configuration

- SSMB Plug Connector
- 50 Ohms
- Right Angle Body Geometry

- RG178, RG196 Interface Type
- Crimp/Solder Attachment

#### Features

- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45195 SSMB plug right angle connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMB plug right angle connector PE45195 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.

#### Mechanical Specifications

##### Size

Length	0.421 in [10.69 mm]
Width/Dia.	0.33 in [8.38 mm]
Height	0.18 in [4.57 mm]
Weight	0.004 lbs [1.81 g]

#### Material Specifications

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMB Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45195](#)



## SSMB Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45195

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

SEARCH

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMB Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45195](#)



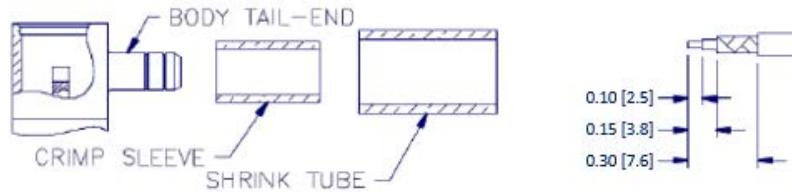
SSMB Plug Right Angle Connector Crimp/  
Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

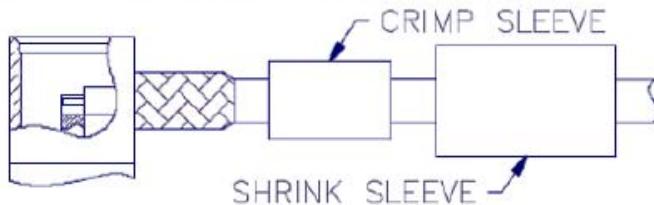
PE45195

Assembly Instruction

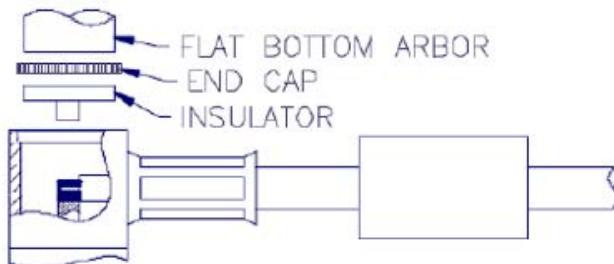
Assembly Instructions



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.

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## SSMB Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45195

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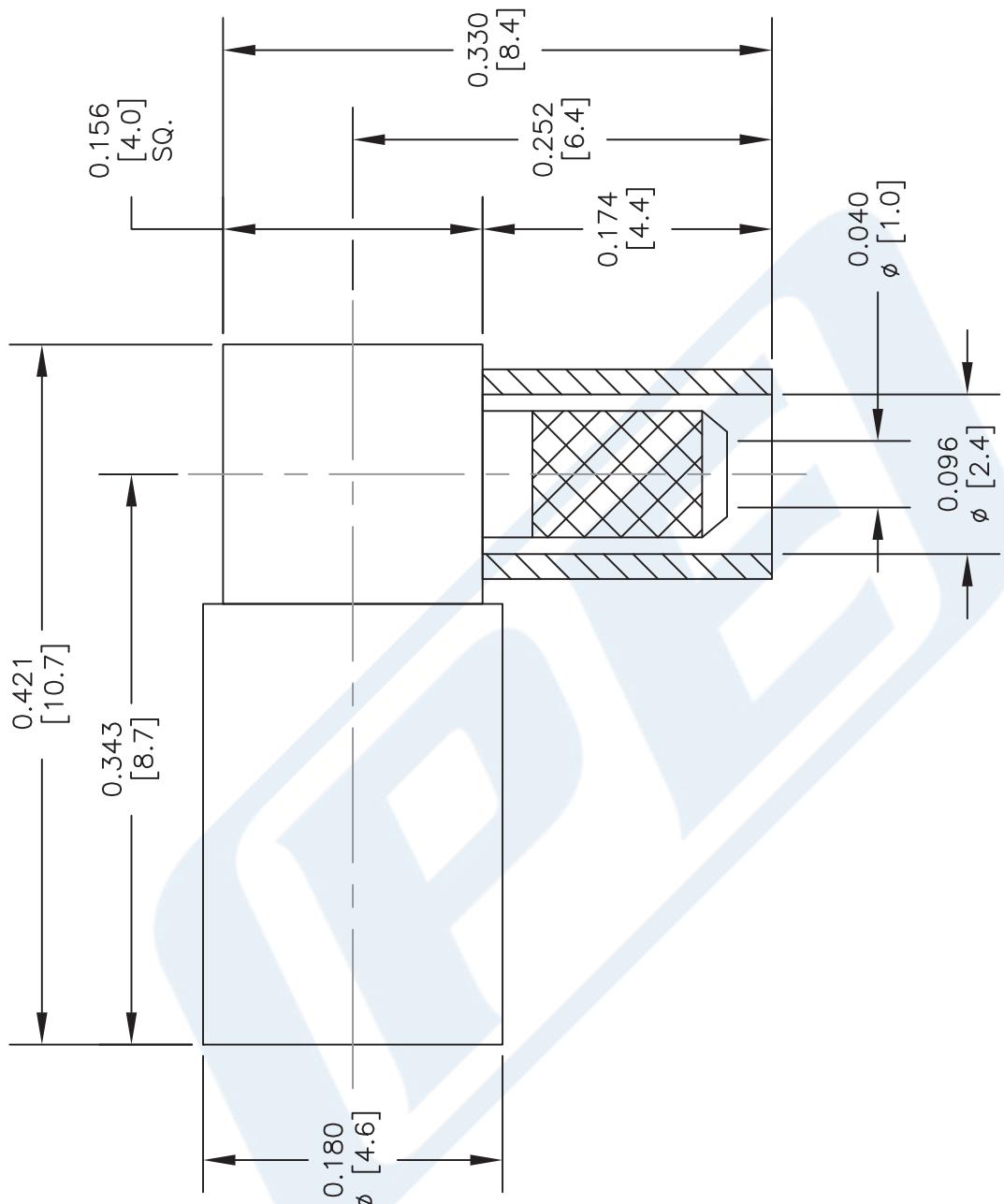
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMB Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45195](#)

URL: <https://www.pasternack.com/ssmb-plug-rg178-rg196-connector-pe45195-p.aspx>

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# PE45195 CAD Drawing

SSMB Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196



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].  
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

PASTERNAK® THE ENGINEER'S RF SOURCE	DWG TITLE <b>PE45195</b>	FSCM NO. 53919	CAD FILE 060815	SCALE N/A	SIZE A	2233
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## Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

**RG178B/U**

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Velocity of Propagation		70		%
Operating Voltage (AC)			1,000	Vrms
Nominal Capacitance		29.4 [96.46]		pF/ft [pF/m]

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	3		GHz
Attenuation, Typ	13.81	27.8	44.41	78.4		dB/100ft
	45.31	91.21	145.7	257.22		dB/100m

#### Mechanical Specifications

Diameter	0.072 in [1.83 mm]
Weight	0.005 lbs/ft [0.01 Kg/m]
Min. Bend Radius (Repeated)	0.4 in [10.16 mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.012 in [0.3 mm]
Conductor Type	Stranded	
Dielectric	PTFE	0.034 in [0.86 mm]
First Shield	Silver Plated Copper Braid	0.051 in [1.3 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

## Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

## RF Cables Technical Data Sheet

RG178B/U

Jacket	FEP, Tan	0.072 in [1.83 mm]
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**Environmental Specifications****Temperature**

Operating Range

-55 to +200 deg C

**Compliance Certifications** (see [product page](#) for current document)**Plotted and Other Data**

Notes:

Flexible RG178 Coax Cable Single Shielded with Tan FEP 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.

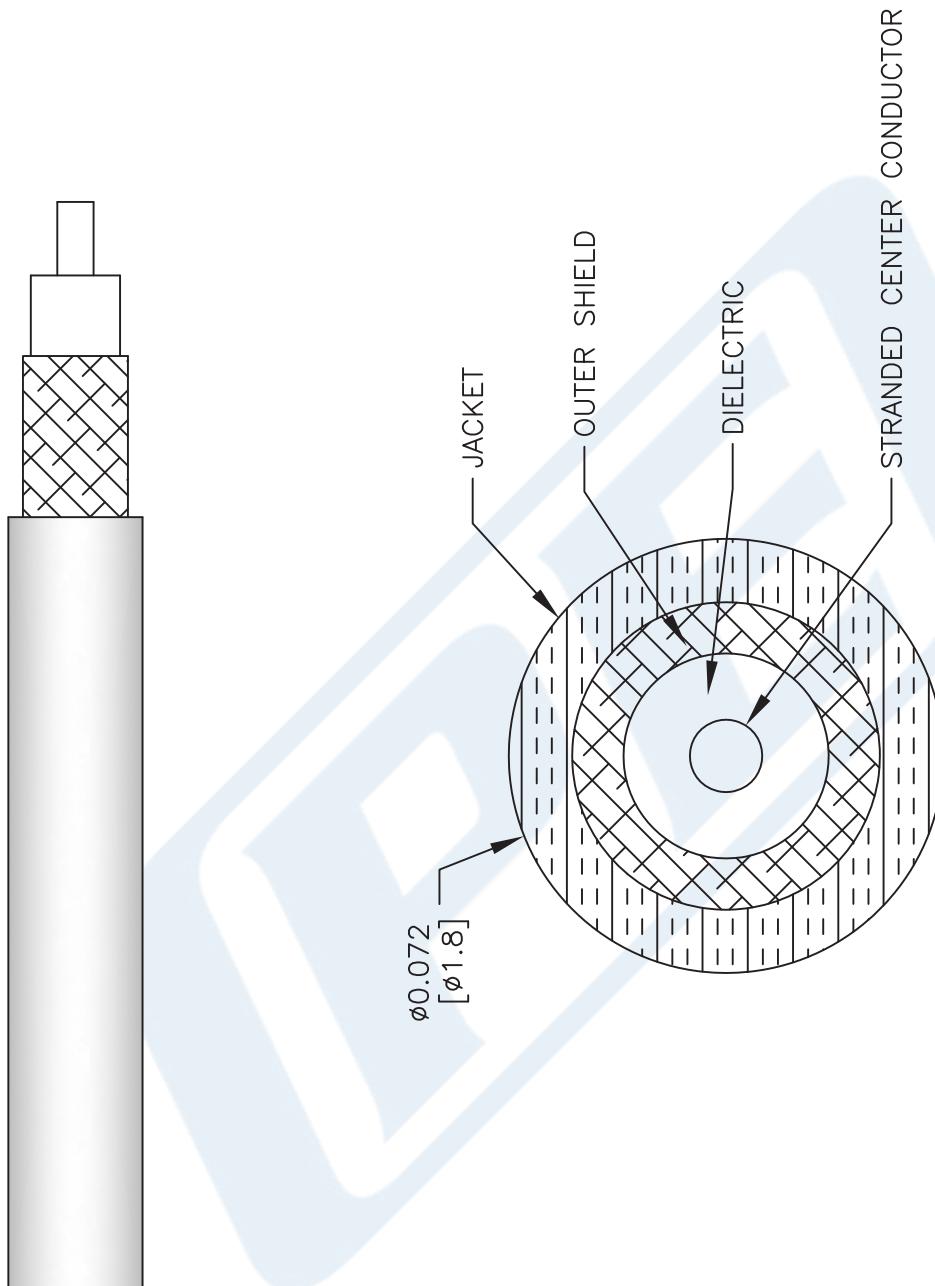
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

URL: <https://www.pasternack.com/flexible-0.075-rg178-50-ohm-coax-cable-fep-jacket-rg178b-u-p.aspx>

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# RG178B/U CAD Drawing

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket



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THE ENGINEER'S RF SOURCE

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DWG TITLE	RG178B/U		
CAGE CODE	53919	CAD FILE	032117

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SIZE	A	2233
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