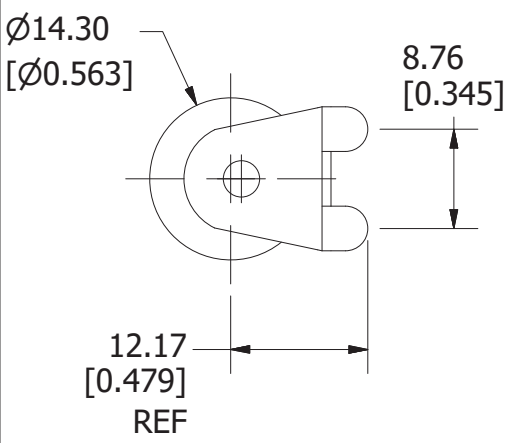
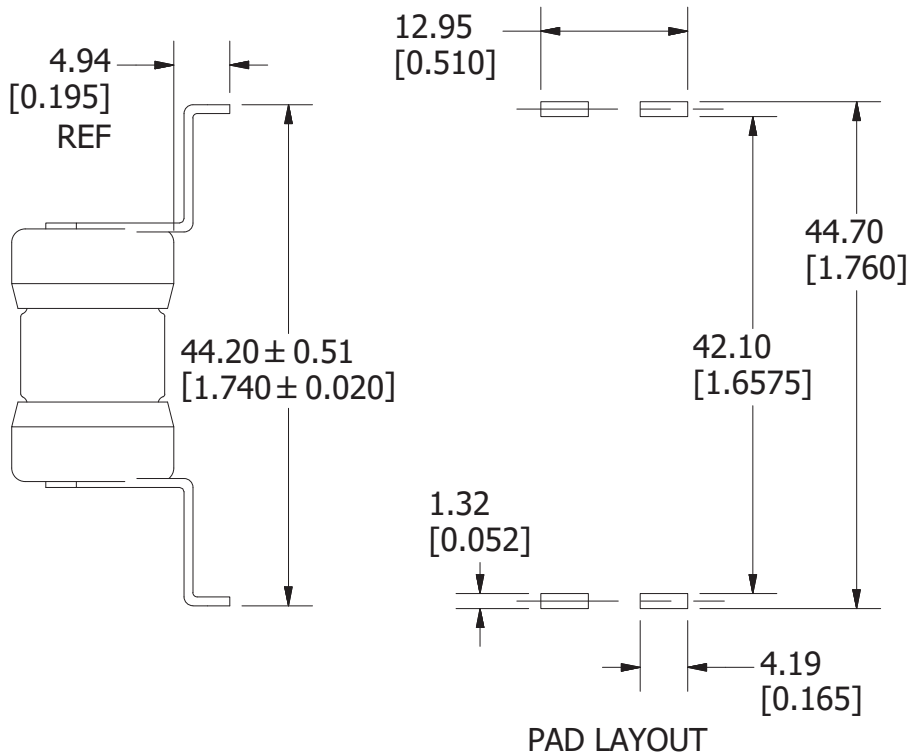


REVISION		
REV	DATE	DESCRIPTION
A	10/8/20	522906GCP - RELEASE MRY
B	11/8/21	524438ECP/D - CHANGE HEIGHT TOLERANCE MRY

<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE		
●	DENOTES CRITICAL CHARACTERISTICS.		
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE		
ST	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.		
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.		
MATL SPEC		FINISH	
DRW myork	DATE 9/30/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994			
3RD ANGLE PROJECTION			
TITLE TLS CARTRIDGE STYLE OUTLINE			
Littelfuse CHICAGO, ILLINOIS 60631		REVISION B	DRWG NO. OL-0TLS000

A



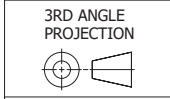
REVISION		
REV	DATE	DESCRIPTION
A	10/8/20	522906GCP - RELEASE MRY

<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
ST	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

MATL SPEC		FINISH	
DRW myork	DATE 9/30/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

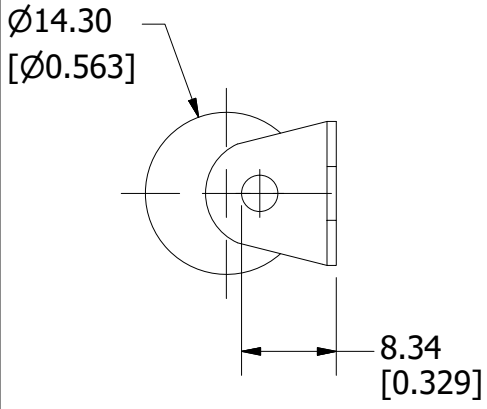
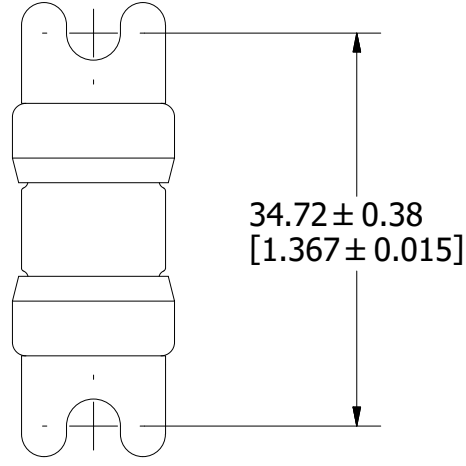
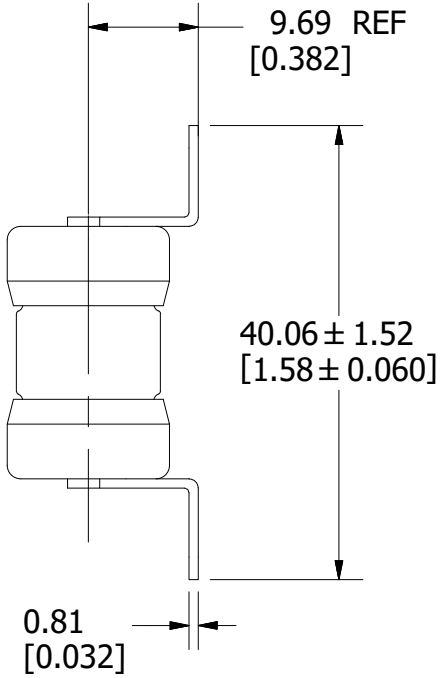
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994



TITLE	TLS-L SERIES OUTLINE
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 CHICAGO, ILLINOIS 60631	REVISION	DRWG NO.	SHEET 1 OF 1
	A	OL-0TLS000L	

REVISION		
REV	DATE	DESCRIPTION
A	12/28/20	523247GCP - RELEASE MRY

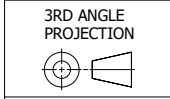


<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
⬡	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

MATL SPEC		FINISH	
DRW myork	DATE 12/28/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

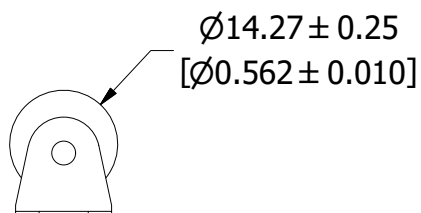
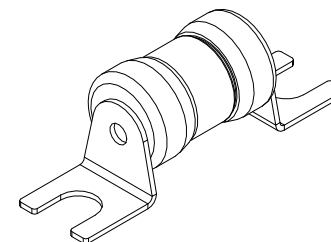
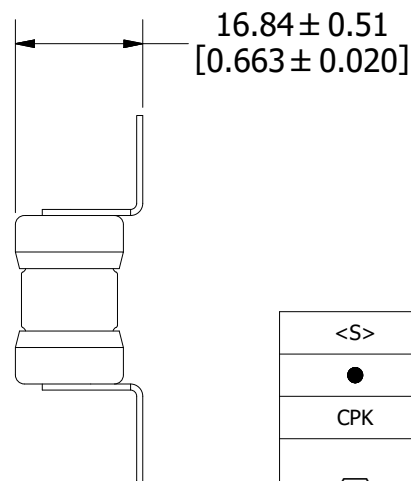
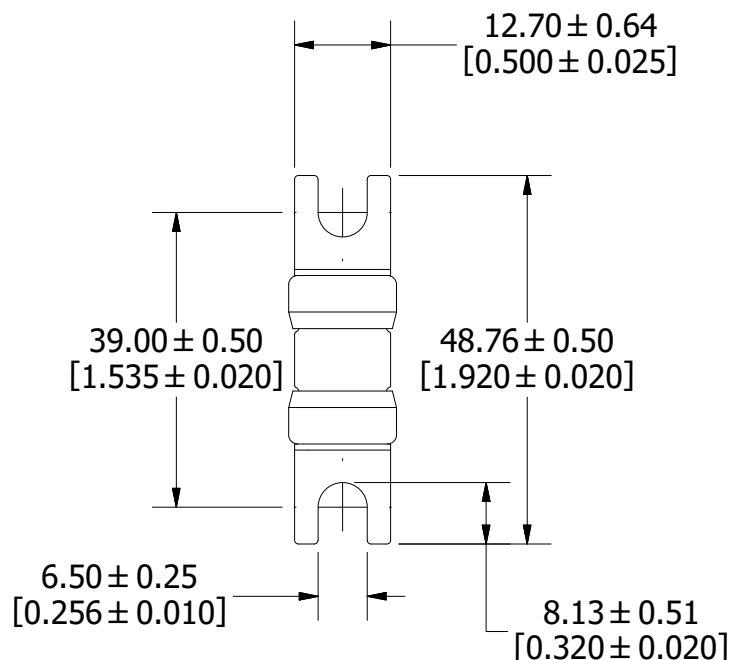


TITLE	TLS-LB SERIES OUTLINE
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NOTES:
 RECOMMENDED HARDWARE: #8 SLOTTED HEX WASHER HEAD MACHINE SCREW
 TORQUE: 10 IN-LB

 CHICAGO, ILLINOIS 60631	REVISION	DRWG NO.	SHEET 1 OF 1 OUTLINE
	A	OL-0TLS000LB	

REVISION		
REV	DATE	DESCRIPTION
A	3/23/21	523515GCP - RELEASE MRY



<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
⬡	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

MATL SPEC		FINISH	
DRW MYORK	DATE 3/9/2021	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

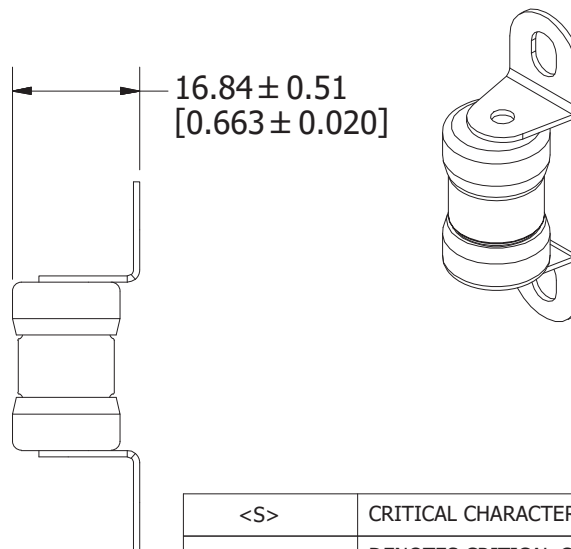
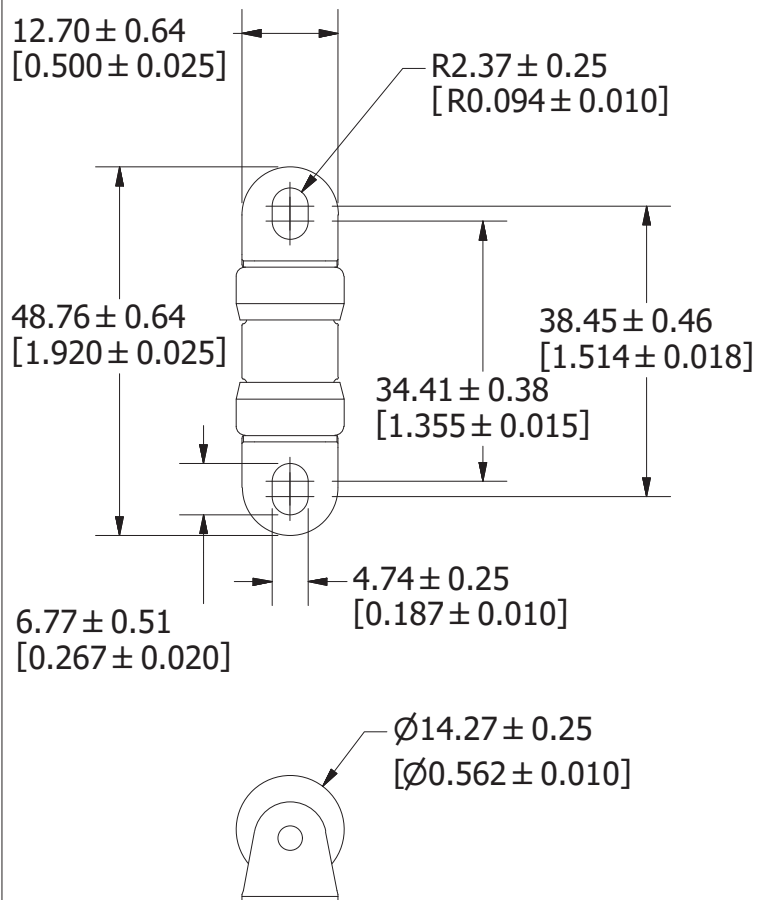
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

3RD ANGLE PROJECTION	
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TITLE TLS-LBE OUTLINE

 Littelfuse [®] CHICAGO, ILLINOIS 60631	REVISION	DRWG NO.	SHEET 1 OF 1
	A	OL-0TLS000LBE	

REVISION		
REV	DATE	DESCRIPTION
A	12/20/18	520065GCP - RELEASE MRY
B	11/14/19	521621ECP/D - ADD TOLERANCES MRY



<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
⬡	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

MATL SPEC		FINISH	
DRW myork	DATE 10/16/2018	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

3RD ANGLE
PROJECTION



TITLE

TLS-LR OUTLINE



REVISION

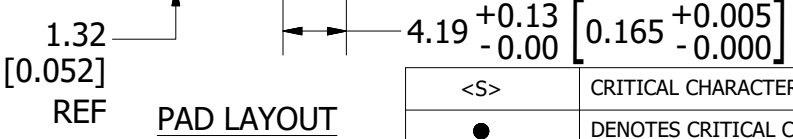
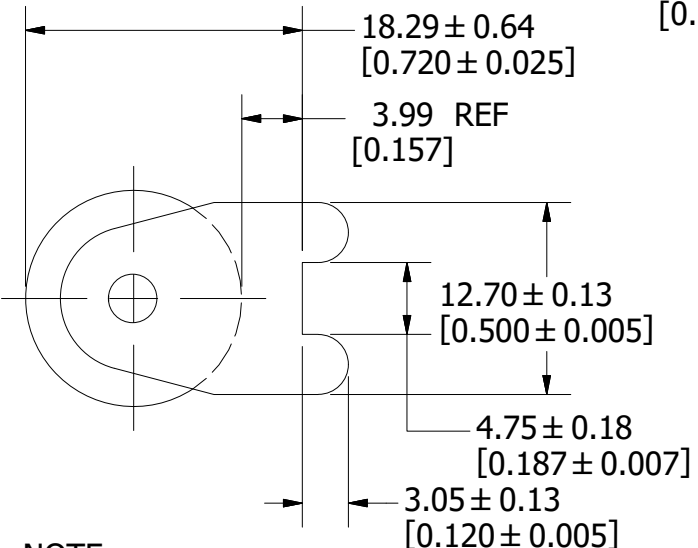
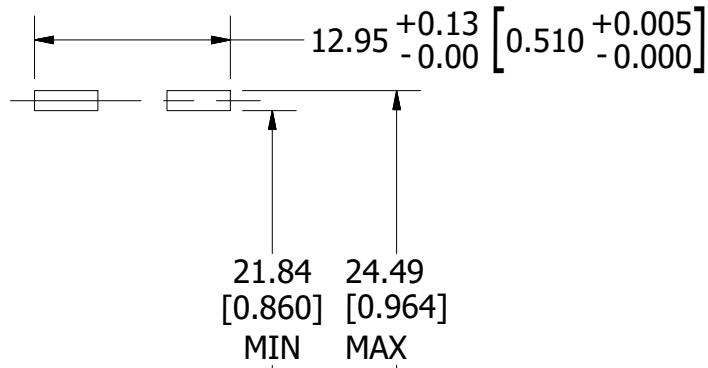
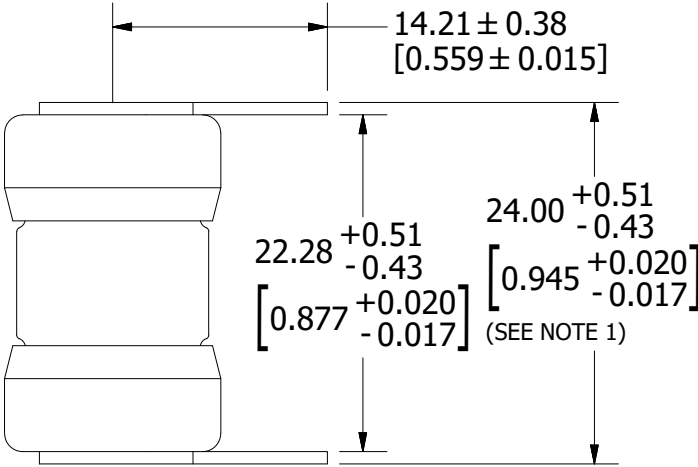
DRWG NO.

SHEET 1 OF 1

B

OL-0TLS000LR

REVISION		
REV	DATE	DESCRIPTION
H	10/20/20	522885ECP/D - REDRAW IN INVENTOR, ADD METRIC DIMENSIONS MRY



NOTE:
1. MEASUREMENT TAKEN AT END OF TERMINALS.

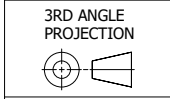
LEAD-FREE SOLDERING PROFILE:
PRE-HEAT: ABOVE 130°C FOR 75 SECONDS MAX
REFLOW: 278°C FOR 8 SECONDS MAX
TIME: 250 SECONDS MAX.
MAX. TEMP: 280°C

<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
⊠	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

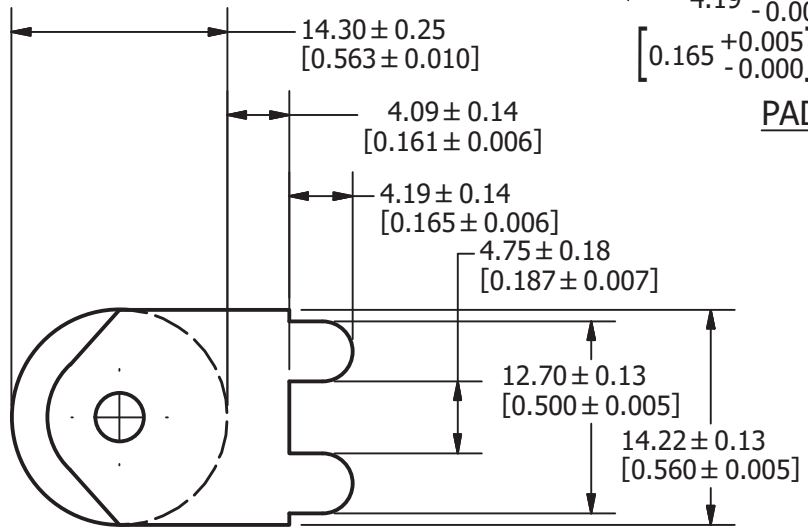
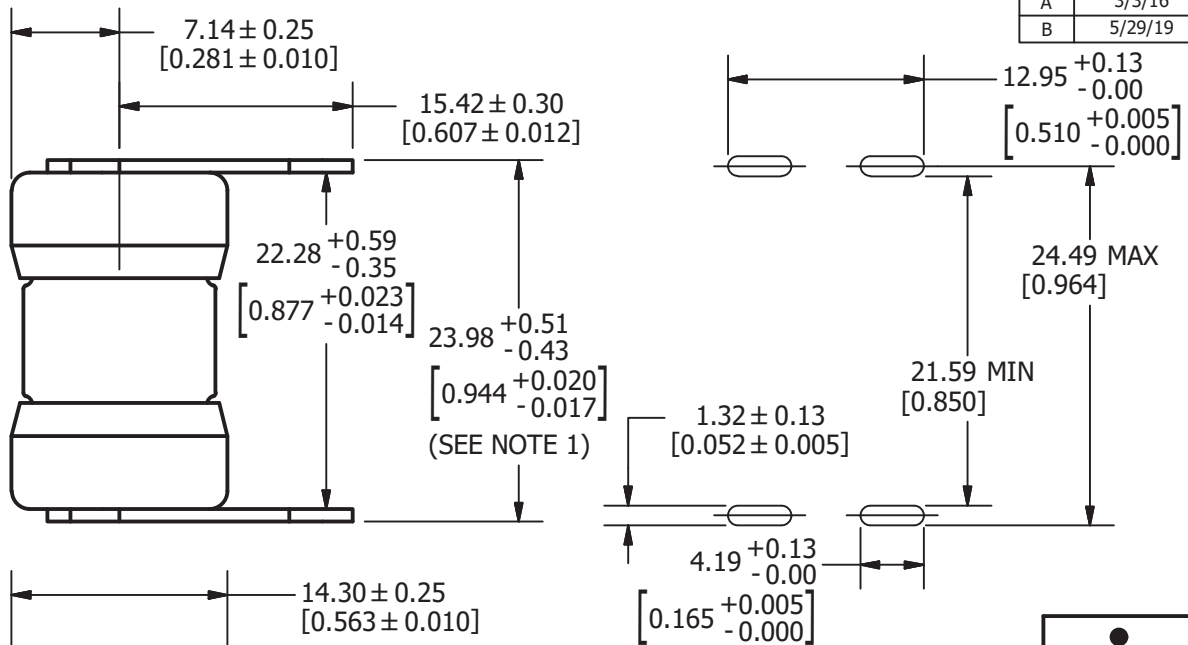
MATL SPEC		FINISH	
DRW myork	DATE 9/22/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994



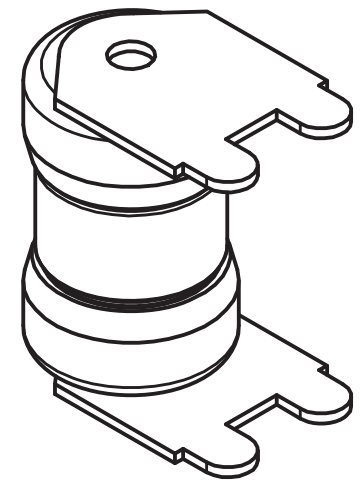
TITLE	TLS-LS OUTLINE & PAD LAYOUT
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Littelfuse CHICAGO, ILLINOIS 60631	REVISION H	DRWG NO. OL-0TLS000LS	SHEET 1 OF 1
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PAD LAYOUT

REVISION		
REV	DATE	DESCRIPTION
A	3/3/16	515620GCP - RELEASE PER SALES RELEASE EM2816 MRY
B	5/29/19	520867ECP/D - UPDATE DIMENSIONS MRY



●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
⊠	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

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MATL SPEC		FINISH	
DRW MYORK	DATE 7/22/2015	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

3RD ANGLE PROJECTION	
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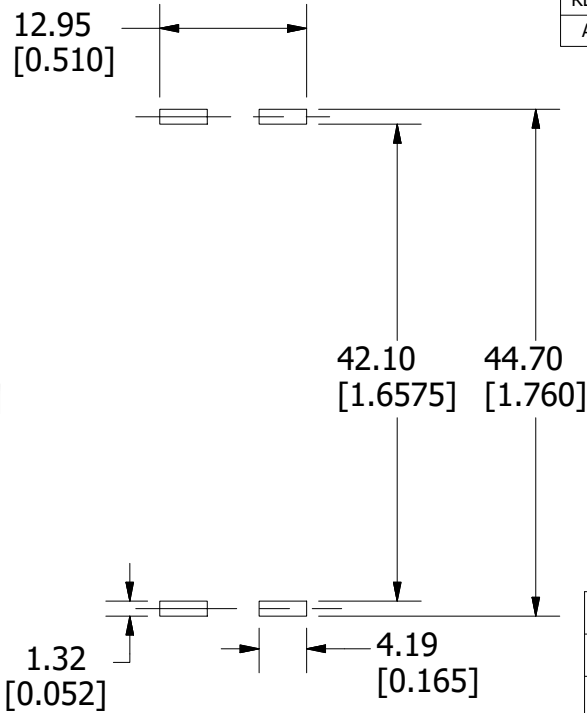
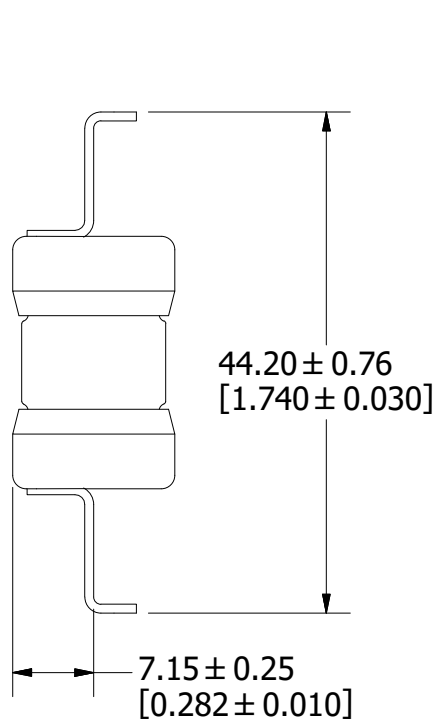
TITLE	TLS-LSE OUTLINE
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NOTE:
1. MEASUREMENT TAKEN AT END OF TERMINALS.

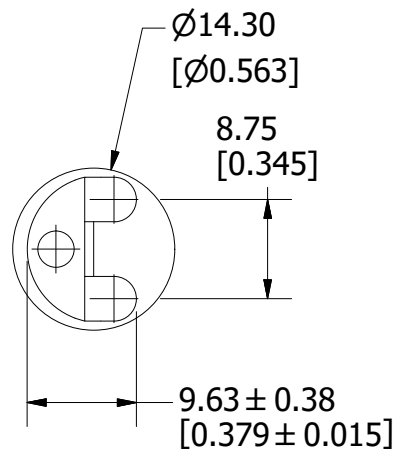
LEAD-FREE SOLDERING PROFILE:

PRE-HEAT: ABOVE 130°C FOR 75 SECONDS MAX.
REFLOW: 278°C FOR 8 SECONDS MAX.
TIME: 250 SECONDS MAX.
MAX. TEMP: 280°C

Littelfuse CHICAGO, ILLINOIS 60631	REVISION B	DRWG NO. OL-0TLS000LSE	SHEET 1 OF 1
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PAD LAYOUT



REVISION		
REV	DATE	DESCRIPTION
A	12/29/20	523247GCP - RELEASE MRY

<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
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CP	DENOTES CP DIMENSIONS, -MINIMUM CP VALUE MUST BE WITHIN THE DIMENSIONAL LIMITATIONS SHOWN ON DRAWING AND INITIALLY LOCATED TO ALLOW FOR MAXIMUM TOOL LIFE.

A

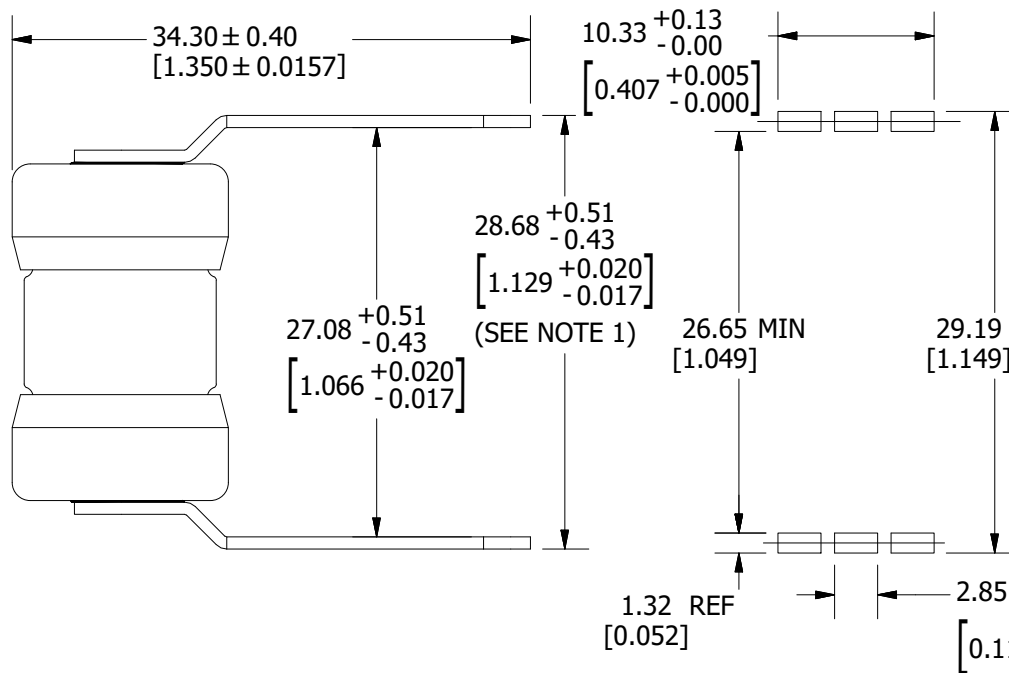
MATL SPEC		FINISH	
DRW myork	DATE 12/29/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

3RD ANGLE PROJECTION	
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TITLE TLS-MB SERIES OUTLINE

<p>Littelfuse[®] CHICAGO, ILLINOIS 60631</p>	REVISION	DRWG NO.	SHEET 1 OF 1 OUTLINE
	A	OL-0TLS000MB	



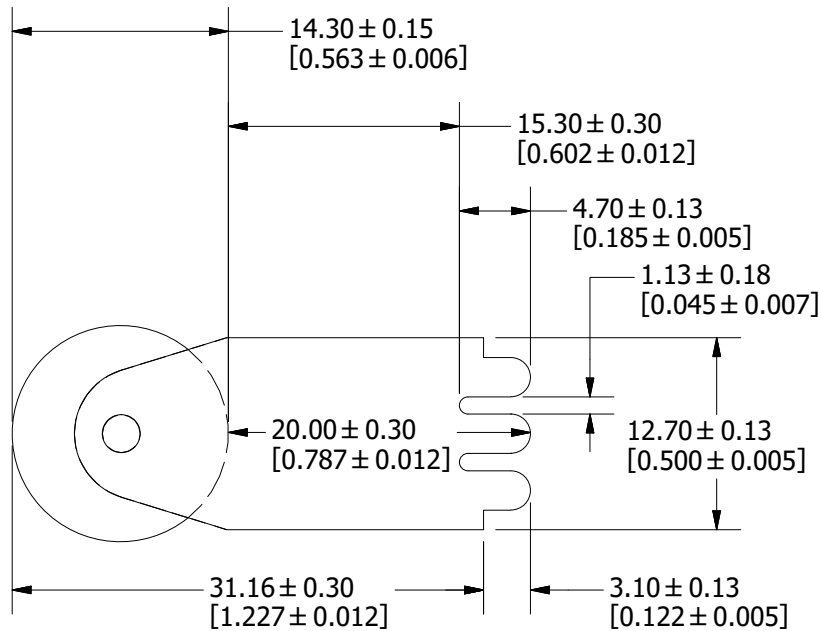
REVISION		
REV	DATE	DESCRIPTION
A	4/17/18	519174GCP - RELEASE MRY
B	11/19/20	523066ECP/B - UPDATE DIMENSIONS MRY

NOTE:
1. MEASUREMENT TAKEN AT END OF TERMINALS.

LEAD FREE SOLDERING PROFILE:

PRE-HEAT: ABOVE 130°C FOR 75 SECONDS MAX
 REFLOW: 278°C FOR 8 SECONDS MAX
 TIME: 250 SECONDS MAX.
 MAX TEMP: 280°C

PAD LAYOUT

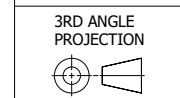


●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
ST	DENOTES A CHARACTERISTIC THAT PROVIDES AN INDICATION OF PROCESS PERFORMANCE. PROCEDURE FOR MEASUREMENT AND TRACKING TO BE DEFINED IN LITTELFUSE INSPECTION INSTRUCTIONS.
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A

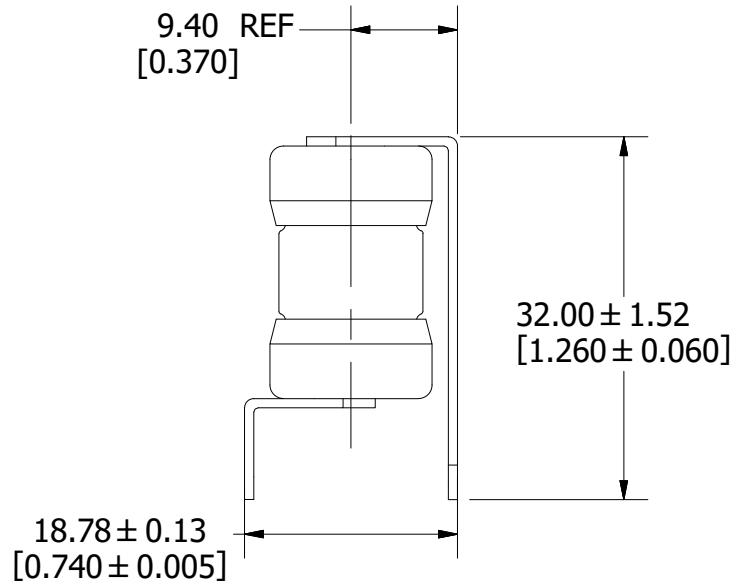
MATL SPEC		FINISH	
DRW myork	DATE 4/4/2018	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994



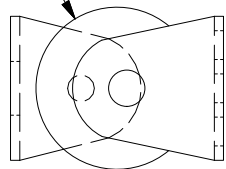
TITLE	TLS-SLSA OUTLINE & PAD LAYOUT
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 CHICAGO, ILLINOIS 60631	REVISION	DRWG NO.	SHEET 1 OF 1
	B	OL-0TLS000SLSA	

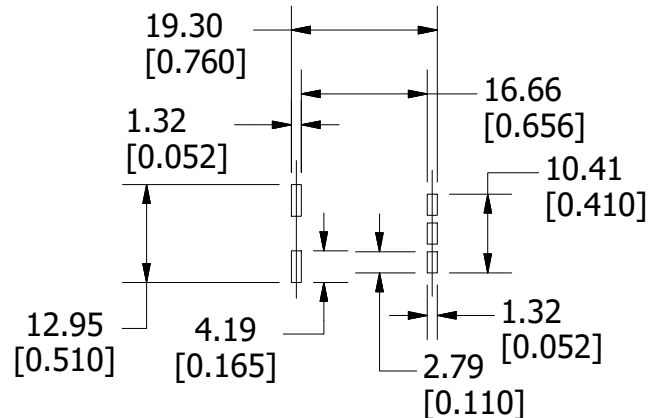


18.78 ± 0.13
[0.740 ± 0.005]

Ø14.30
[Ø0.563]



REVISION		
REV	DATE	DESCRIPTION
A	12/29/20	523247GCP - RELEASE MRY



PAD LAYOUT

<S>	CRITICAL CHARACTERISTIC FOR PART SAFETY/COMPLIANCE
●	DENOTES CRITICAL CHARACTERISTICS.
CPK	DENOTES CPK DIMENSIONS, -MINIMUM CPK VALUE
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A

MATL SPEC		FINISH	
DRW myork	DATE 12/29/2020	SCALE NTS	FINISH GOOD WT GRAMS/PIECE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS, DIMENSIONS IN BRACKETS [] ARE INCHES DIMENSIONING AND DO NOT INCLUDE PLATING. TOLERANCING TO BE INTERPRETED IN ACCORDANCE WITH ANSI Y14.5M-1994

3RD ANGLE
PROJECTION



TITLE TLS-V SERIES OUTLINE

Littelfuse[®]
CHICAGO, ILLINOIS 60631

REVISION

A

DRWG NO.

OL-0TLS000V

SHEET 1 OF 1
OUTLINE