UNDERWRITERS' LABORATORIES, INC.
NORTHBROOK, IL.•MELVILLE, NY.•SANTA CLARA, CA.•TAMPA, FL.
an independent, not-for-profit organization testing for public safety

File E82634
Project 84ME2257

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REPORT

on

COMPONENT - POLYMERIC PARTS
(Coaxial Cable Tap Housing)

AMP, Inc.
Harrisburg, PA

D E S C R I P T I O N

PRODUCT COVERED:

Coaxial-Cable Tap Housings: Cat. Nos. 227954-1; 228105-1, -3, -4; *228752-1, -2, -3, -4, -5, -6, -8, 221914, 221918, 222455 and 415195.

GENERAL:

The housing which serves as the enclosure for a coaxial tap device is the only part covered by this report. The tap device, including its electronic circuitry, is not covered by this report. The coaxial-cable housing and tap device system permits tap connections to be made to coaxial-cable by piercing the insulation and jacket, without cutting the cable or interrupting service.

These housings are intended for use with Listed Coaxial Power-Limited Circuit Cables Classified For Fire and Smoke Characteristics (QPWR) category in accordance with Section 725-2(b) of the National Electrical Code (ANSI/NFPA-70-1084). Section 725-2(b) contains an exception which permits use of this product in accordance with Sections 300-22(b) and 300-22(c) of the National Electrical Code. However, this product may only be used in conformance with Section 300-22(c).

The coaxial-cable tap housing incorporates insulation piercing probes which, when activated by a force exerted by a clamping mechanism, captures and holds the center conductor of the coaxial-cable. The probes are insulated so as to provide isolation between the center conductor of the coaxial-cable and its shield.

Cat. No. 227954-1 consists of a coaxial cable clamping mechanism and two separable halves which enclose the electronic circuitry (not provided by the manufacturer and not covered by this report). The separable halves each contain a metal shield which isolates the electronic circuitry from the coaxial-cable tap housing.

Cat. No. 228105-1 consists of a coaxial-cable clamping mechanism and a base containing the insulation piercing probes for use with No. 14 AWG wire. It is intended to be surface mounted to an enclosure containing the electronic circuitry (not provided by the manufacturer and not covered by this report).

Cat. No. 228752-1 consists of a coaxial-cable clamping mechanism, a tap body, two braid terminators and a probe assembly. The tap body features a cable channel that retains the cable and a slot to accept a printed circuit board (not provided by the manufacturer and not covered by this report).

The following part numbers are similar to the part numbers described above with the following exceptions:

	Part Number	Similar To	Exception
	228105-3	228105-1	Intended for use with No. 10 AWG wire.
	228105-4	228105-1	Intended for use with 0.09 in dia center conductor coaxial-cable.
	228752 2 228752-3 228752-4 228752-5 228752-6 228752-8	228752-1	Provided with pressure-sensitive label bearing customer's name. Refer to Ills. 10 - 13 for details.
*	415195	228752	None (for export only)

ENGINEERING CONSIDERATIONS (NOT FOR INSPECTOR USE):

Use - For use only with products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability -

1. The suitability of the flame ratings of the insulating materials must be evaluated in the end-use.

2. The operating temperature of these devices should not exceed the max thermal index of the insulating material. These materials may be used interchangeably at a maximum temperature of 50°C.

3. The insulation piercing probe is rated 30 V, 100 mA max (Class 2 circuit). The acceptability of these ratings in conjunction with the electronic circuitry shall be evaluated in the end-use.

4. The suitability of the mounting means shall be evaluated in the end-use.

5. Samples used in the test for flame spread and smoke generation were comprised of Cat. No. 227954-1 incorporating a multilayer glass epoxy laminate, ANSI FR-4, printed wiring board (flame rated 94V-0) 10-3/8 in by 3-3/16 in by 1/16 in thick, employing the electronic circuitry, and interfacing 15-pin male plug connector manufactured by General Electric Co. "Valox" 420-SEO, "Valox" 533, or Union Carbide "Mindel" B-322 material. Suitability of combinations other than the preceding shall be evaluated in the end-use.

6. These coaxial-cable tap housings are intended to be used only with Listed Coaxial Power-Limited Circuit Cables that are Classified As To Fire And Smoke Characteristics Only (In Accordance With Section 725-2(b) Of The National Electrical Code).

7. These coaxial-cable tap housings are intended to be installed to coaxial-cable at a min of 8.25 ft (2.5 m) intervals on a single coaxial-cable run; and, a max of three coaxial-cable tap housings may be installed side-by-side in a paralleling application. Refer to Ill. 6.

* 8. Cat. Nos. 221914, 221918 and 222455 are provided with a dust cover molded of Recognized Component plastic (QMFZ2) Polyflam RPP1174, manufactured by A. Schulman. These covers are intended to be removed after installation.

R.R.
T.D'A.