

SCTE | **STANDARDS**

Interface Practices Subcommittee

AMERICAN NATIONAL STANDARD

ANSI/SCTE 129 2021

**Drop Passives: Bonding Blocks
(Without Surge Protection)**

NOTICE

The Society of Cable Telecommunications Engineers (SCTE) Standards and Operational Practices (hereafter called “documents”) are intended to serve the public interest by providing specifications, test methods and procedures that promote uniformity of product, interoperability, interchangeability, best practices, and the long term reliability of broadband communications facilities. These documents shall not in any way preclude any member or non-member of SCTE from manufacturing or selling products not conforming to such documents, nor shall the existence of such standards preclude their voluntary use by those other than SCTE members.

SCTE assumes no obligations or liability whatsoever to any party who may adopt the documents. Such adopting party assumes all risks associated with adoption of these documents and accepts full responsibility for any damage and/or claims arising from the adoption of such documents.

NOTE: The user’s attention is called to the possibility that compliance with this document may require the use of an invention covered by patent rights. By publication of this document, no position is taken with respect to the validity of any such claim(s) or of any patent rights in connection therewith. If a patent holder has filed a statement of willingness to grant a license under these rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license, then details may be obtained from the standards developer. SCTE shall not be responsible for identifying patents for which a license may be required or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention.

Patent holders who believe that they hold patents which are essential to the implementation of this document have been requested to provide information about those patents and any related licensing terms and conditions. Any such declarations made before or after publication of this document are available on the SCTE web site at <https://scte.org>.

All Rights Reserved
© Society of Cable Telecommunications Engineers, Inc. 2021
140 Philips Road
Exton, PA 19341

Table of Contents

Title	Page Number
NOTICE.....	2
Table of Contents.....	3
1. Introduction.....	5
1.1. Executive Summary.....	5
1.2. Scope.....	5
1.3. Benefits.....	5
1.4. Intended Audience.....	5
1.5. Areas for Further Investigation or to be Added in Future Versions.....	5
2. Normative References.....	5
2.1. SCTE References.....	6
2.2. Standards from Other Organizations.....	6
2.3. Published Materials.....	6
3. Informative References.....	6
3.1. SCTE References.....	6
3.2. Standards from Other Organizations.....	6
3.3. Published Materials.....	6
4. Compliance Notation.....	7
5. Mechanical.....	7
5.1. RF Ports.....	7
5.1.1. Port Spacing.....	7
5.1.2. Axial Force.....	7
5.1.3. RF Port Mount Rotational Torque.....	7
5.2. Center Conductor Mating and Retention Force.....	7
5.3. Mounting.....	8
5.4. Bonding.....	8
5.5. Galvanic Compatibility.....	9
5.6. Listing Requirements.....	10
5.7. Listing Stamp Requirements.....	10
6. Electrical.....	10
6.1. Bandwidth.....	10
6.2. Insertion Loss / Return Loss.....	10
6.3. Shielding Effectiveness.....	11
6.4. Surge Withstand.....	11
6.5. Bonding effectiveness.....	11
7. Environmental.....	11
7.1. Salt Spray.....	11
7.2. Temperature.....	12

List of Figures

Title	Page Number
Figure 1 - Orthogonal Mounting of Device on Centerline Pattern.....	8
Figure 2 - Bonding Wire Seizure Arrangement.....	8
Figure 3 - Galvanic Compatibility as per MIL-STD-889.....	9

List of Tables

Title	Page Number
Table 1 - AWG Size, Hole Size, Terminal Screw Size and Torque	9
Table 2 - Allowable Military/Aviation/Marine Limits.....	10
Table 3 - Wire Size vs. Hole Size	10
Table 4 - Insertion Loss / Return Loss	11