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AEROSPACE STANDARD

SAE AS4156

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COLOR-CODED INCANDESCENT FLANGE BASE T1 AND T1-3/4 LAMPS FOR VOLTAGE IDENTIFICATION

FOREWORD

There are a number of incandescent flange base miniature lamps having identical appearances and producing about the same light output but are designed to operate at different voltages, primarily 5, 14, or 28 V. In several applications a 5 V lamp installed in place of a 28 V lamp can cause failures of electronic components due to its lower impedance and consequently higher current. Since these lamps are almost identical in appearance and so small as to make identification by markings almost impossible, this document is intended to provide a means of identification of voltage differences.

1. SCOPE:

This document defines the method for voltage identification by use of color coded insulators at the base of the lamp. Table 1 shows lamp part numbers and corresponding insulator colors. Insulator colors are to be easily distinguishable as red, yellow, and green. Tables 2 and 3 show complete descriptions of the lamps involved for the T1-3/4 and T1 lamps respectively. New lamp part numbers may be added by a revision process as required.

2. REFERENCES:

There are no referenced publications specified herein.

3. RECOMMENDATIONS:

For aerospace applications, the lamps listed in Tables 2 and 3 should be ordered by the part number shown in Table 1 so that replacement lamps can be easily identified as to voltage. It should be noted that this part number consists of the ANSI trade number with a dash number, which identifies the insulator color.

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TABLE 1 - Voltage Identification of T1 and T1-3/4 Flange Base Lamps

T1 Lamps	T1 Lamps	T1-3/4 Lamps	T1-3/4 Lamps
Part Number	Design Volts and Insulator Color	Part Number	Design Volts and Insulator Color
685-005	5 V = Green	7335-005	5 V = Green
714-005	5 V = Green	328-005	5-6 V = Green
718-005	5 V = Green	8918-014	14 V = Yellow
8112-014	14 V = Yellow	382-014	14 V = Yellow
6839-028	28 V = Red	327-028	28 V = Red
		387-028	28 V = Red
		385-028	28 V = Red

NOTE:

T1 Base

T1-3/4 Base

Green insulator = 5 to 6 V
 Yellow insulator = 12 to 14 V
 Red insulator = 24 to 28 V

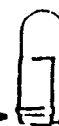


TABLE 2 - T1-3/4 Lamps

ANSI Trade No.	Volts	Amps	M.S.C.P.	For Ref. Only AC Life	For Ref. Only DC Life
7335	5.0	0.115	0.15	30 000	15 000
328	5.0-6.0	0.200	0.34	2 000	2 000
8918	14.0	0.100	0.50	10 000	5 000
382	14.0	0.080	0.30	10 000	5 000
327	28.0	0.40	0.34	4 000	1 500
387	28.0	0.40	0.30	7 000	2 000
385	28.0	0.40	0.20	10 000	5 000