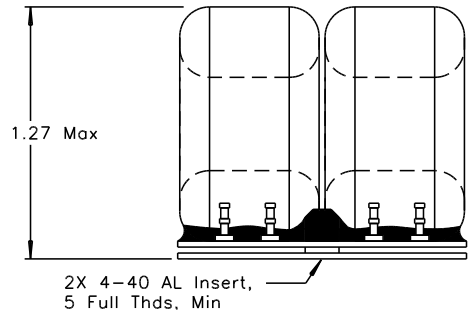
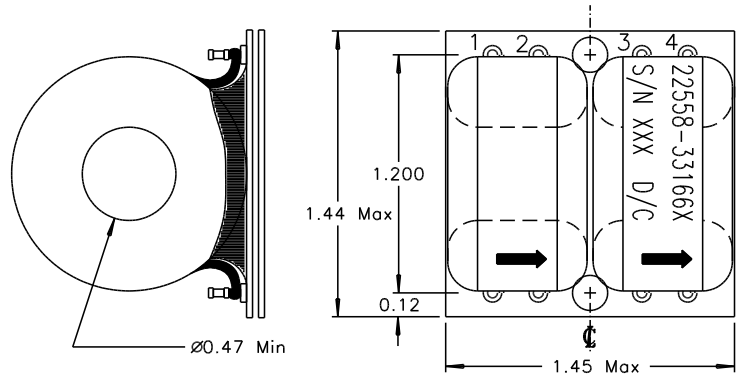


REVISIONS			
REV.	DESCRIPTION	DATE	BY



**Classification**

MIL-PRF-27 Grade: 6  
 MIL-PRF-27 Class: S (130° C)  
 Maximum Ambient Temperature: 105° C

**MIL-STD-981 Quality Assurance Provisions**

Class	Description	Drawing Number <sup>1</sup>
C	Commercial Parts	33166-30
B	Group A Inspection	33166-31B
E	Group A Inspection	33166-31S
S	Group A Inspection	33166-31S and
	Group B Inspection	33166-85

<sup>1</sup> The germane data will ship with the hardware.

Black Arrows denotes direction of current flow.

**Electrical Characteristics**

DC Resistance: (1 - 2) = 180 Ω  
 (Maximum) (3 - 4) = 180 Ω

LOAD CONDITIONS	
E (1 - 2) = 20V <sub>RMS</sub> , 2000 Hz	P <sub>TOTAL</sub> < 0.8W
E (3 - 4) = 20V <sub>RMS</sub> , 2000 Hz	

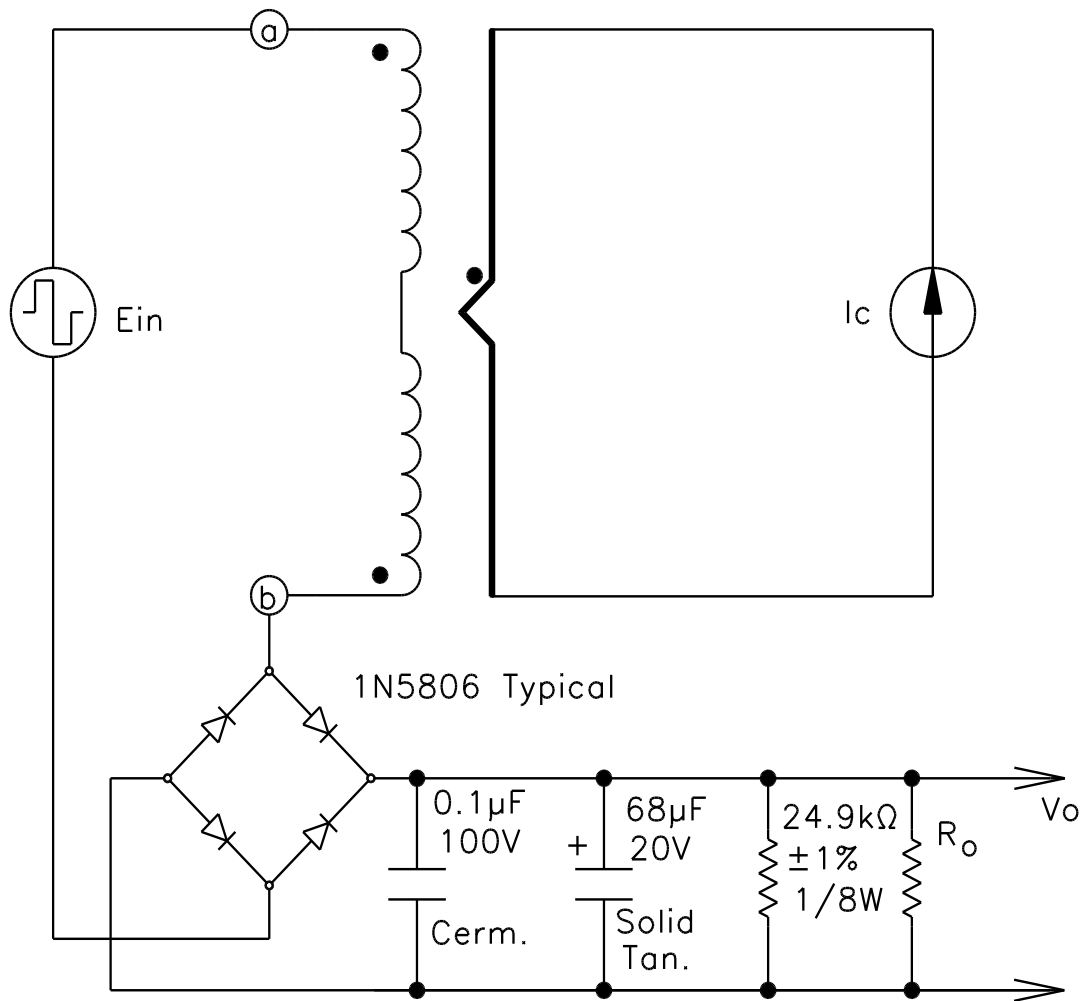
Volt-Seconds, measured at 1.0kHz Sqr. Wave, I<sub>pk</sub> = 100 mA ± 10%, R<sub>s</sub> = 20Ω: 1 - 2 = 15.0 mV-Sec Minimum  
 3 - 4 = 15.0 mV-Sec Minimum

Core Matching: Evidence of core matching per 33166-94 shall accompany each shipment.

Transfer Characteristics: Per Sheet 2

**These Parts Are Manufactured in Strict Compliance to MIL-STD-981.**

The "X" in the part number refers to the Quality Level (C, B, E, or S), see Quality Assurance Provisions above.	UNLESS OTHERWISE SPECIFIED: Dimensions are in inches, and tolerances are:		<b>COAST/ACM</b>		
	Fractions	Decimals			
	±1/64	.X = ±0.1 .XX = ±0.02 .XXX = ±0.010	±5°	<b>Transformer, Current Monitor</b>	
	DRAWN BY	DATE	FSCM	DWG. NO	REV.
	Jim Allen	06/09/04	22558	33166X	
DO NOT SCALE DRAWING			SCALE: none	MAX. WT.: 59 grams	SHEET 1 OF 1



Set  $E_{in} = 29 \text{ V Pk-Pk}$  (Square Wave) at 2000 Hz

Transfer Characteristics:

Route 1 turn  $I_c$  cable  $> 6''$  from core, before and after going through the core.

Select  $R_o$  for best transfer characteristics curve for both windings.

Note: Substitute terminals 1 and 2 for **a** and **b** in the schematic and test, then substitute terminals 3 and 4 for **a** and **b** in the schematic and re-test

$I_c$ (ADC)	$V_o$ (VDC)
0.0	0.000 - 0.200
+0.4	0.208 - 0.608
+0.6	0.412 - 0.812
+1.0	0.82 - 1.22
+2.0	1.84 - 2.24
+3.0	2.86 - 3.26
+4.0	3.88 - 4.28
+5.0	4.90 - 5.30

UNLESS OTHERWISE SPECIFIED:  
Dimensions are in inches, and  
tolerances are:

Fractions	Decimals	Angles
$\pm 1/64$	.XX = $\pm 0.03$ .XXX = $\pm 0.010$	$\pm 5^\circ$

DRAWN BY

DATE

Jim Allen

06/09/04

COAST/ACM

TITLE

Transformer, Current Monitor

FSCM

DWG. NO

22558

33166X

DO NOT SCALE

SCALE: none

SHEET 2 OF 2