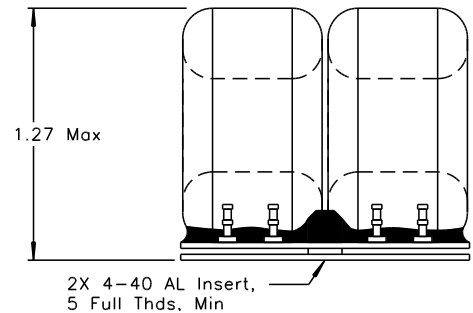
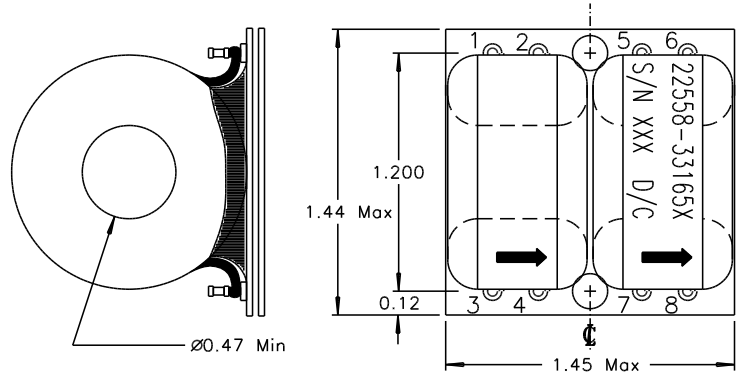


REVISIONS			
REV.	DESCRIPTION	DATE	BY



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 ¹
C	Commercial Parts	33165-30
B	Group A Inspection	33165-31B
E	Group A Inspection	33165-31S
S	Group A Inspection	33165-31S and
	Group B Inspection	33165-85

¹ The germane data will ship with the hardware.

Black Arrows denotes direction of current flow.

Electrical Characteristics

DC Resistance: (1 - 2) = 180 Ω (5 - 6) = 180 Ω
 (Maximum) (3 - 4) = 48 Ω (7 - 8) = 48 Ω

LOAD CONDITIONS	
E (1 - 2) = 20V _{RMS} , 2000 Hz	P _{TOTAL} < 0.8W
E (5 - 6) = 20V _{RMS} , 2000 Hz	

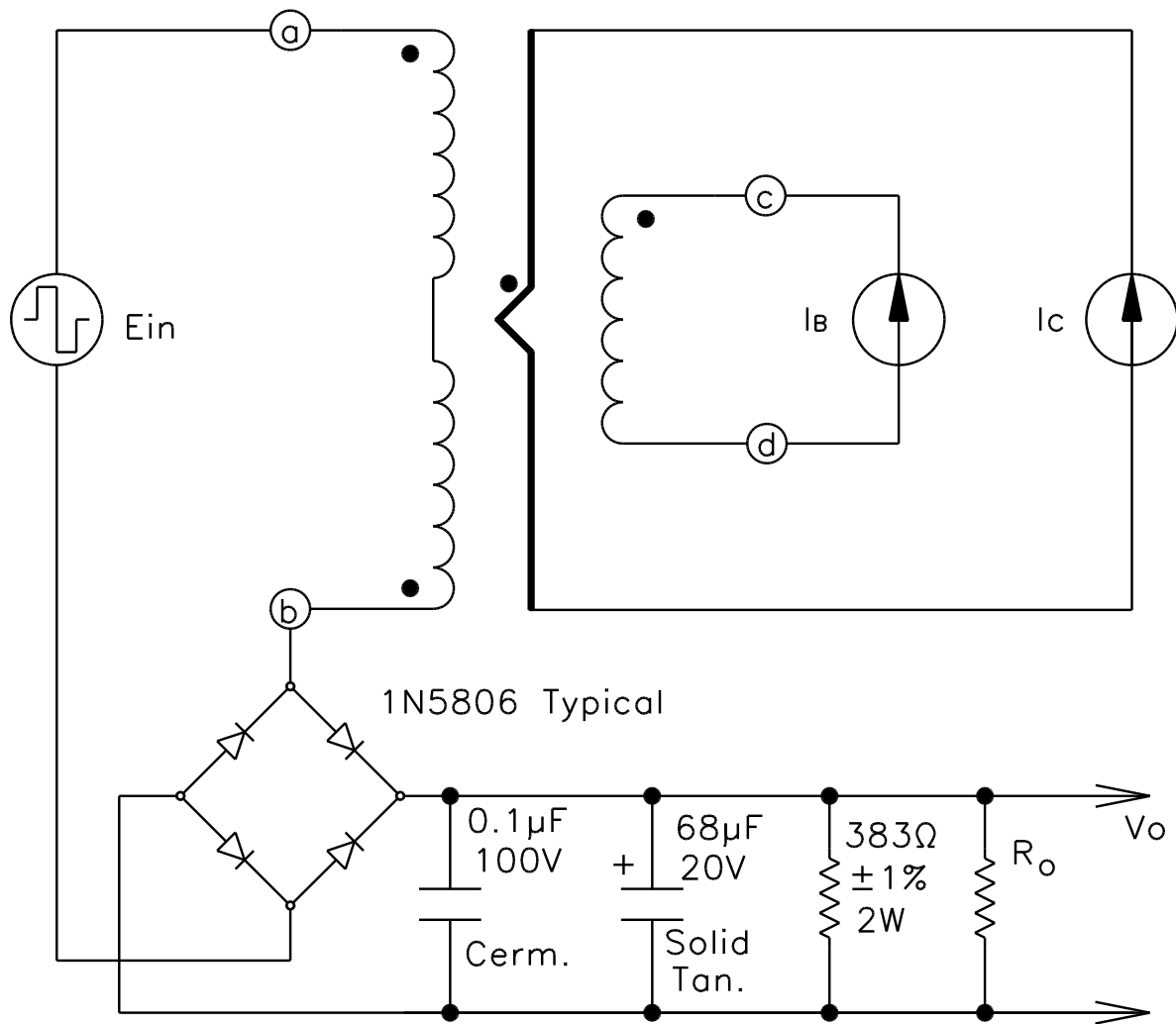
Volt-Seconds, measured at 1.0kHz Sqr. Wave, I_{pk} = 100 mA ± 10%, R_s = 20Ω: 1 - 2 = 15.0 mV-Sec Minimum
 5 - 6 = 15.0 mV-Sec Minimum

Core Matching: Evidence of core matching per 33165-94 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:		COAST/ACM		
	Fractions	Decimals	Angles	TITLE	
	±1/64	.X = ±0.1 .XX = ±0.02 .XXX = ±0.010	±5°	Transformer, Current Monitor	
	DRAWN BY	DATE	FSCM	DWG. NO	REV.
	Jim Allen	06/07/04	22558	33165X	
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 (I_c – Test with I_B open circuit):

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.

Transfer Characteristics (I_B – Test with I_c open Circuit and R_o in place):

Set I_B to $20.0 \text{ mA} \pm 0.5\%$, $V_o = 1.27$ to 1.31 VDC

I_c (ADC)	V_o (VDC)
0.0	0.0000 - 0.2000
+0.4	0.0310 - 0.2510
+1.0	0.0830 - 0.3275
+5.0	0.4375 - 0.8375
+10	1.075 - 1.475
+20	2.350 - 2.750
+30	3.625 - 4.025
+40	4.900 - 5.300

Note: Substitute terminals 1 & 2 for **a** & **b** and 3 & 4 for **c** & **d** in the schematic and test I_c and I_B , then substitute terminals 5 & 6 for **a** & **b** and 7 & 8 for **c** & **d** in the schematic and re-test I_c and I_B .

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

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

DRAWN BY

Jim Allen

DATE

06/07/04

COAST/ACM

TITLE

Transformer, Current Monitor

FSCM

22558

DWG. NO

33165X

DO NOT SCALE

SCALE: none

SHEET 2 OF 2