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**NOTES:**

## **1. REQUIREMENTS:**

#### A. ELECTRICAL:

- (1) CURRENT PULSE ( $I_m$ ):  
(a) AT 25°C: 590 MILLIAMPERES  $\pm$  6 MILLIAMPERES.  
(b) AT 0°C: 635 MILLIAMPERES  $\pm$  6 MILLIAMPERES.  
(c) AT 70°C: 510 MILLIAMPERES  $\pm$  5 MILLIAMPERES.

(2) PARTIAL CURRENT PULSE ( $I_d$ ):  
(a) AT 25°C: 345 MILLIAMPERES  $\pm$  4 MILLIAMPERES.  
(b) AT 0°C: 360 MILLIAMPERES  $\pm$  4 MILLIAMPERES.  
(c) AT 70°C: 290 MILLIAMPERES  $\pm$  3 MILLIAMPERES.

(3) PULSE REPETITION RATE OF  $I_m$  AND  $I_d$ : NOT CRITICAL.

(4) NUMBER OF PARTIAL CURRENT PULSES: 5 OR MORE.

(5) RISE TIME ( $T_r$ ):  
(a) AT 25°C, 0°C AND 70°C: 0.4 MICROSECOND  $\pm$  .02 MICROSECONDS.

(6) PULSE DURATION ( $T_d$ ):  
(a) AT 25°C, 0°C AND 70°C: 3.0 MICROSECONDS (FROM 50% ON THE RISE TO 50% ON THE FALL OF THE PEAK AMPLITUDE OF THE CURRENT PULSE).  $\pm$  .15 MICROSECONDS.

(7) SELECTED UNDISTURBED ONE VOLTAGE OUTPUT ( $v_{V1}$ ):  
(a) AT 25°C: EQUAL TO OR GREATER THAN 60 MILLIVOLTS.  
(b) AT 0°C: EQUAL TO OR GREATER THAN 75 MILLIVOLTS.  
(c) AT 70°C: EQUAL TO OR GREATER THAN 40 MILLIVOLTS.

(8) SELECTED DISTURBED ZERO VOLTAGE OUTPUT ( $dVz$ ):  
(a) AT 25°C, 0°C AND 70°C: LESS THAN OR EQUAL TO 10 MILLIVOLTS.

(9) PEAKING TIME ( $T_p$ ):  
(a) AT 25°C, 0°C AND 70°C: 0.68 PLUS OR MINUS .05 MICROSECOND.

(10) SWITCHING TIME ( $T_s$ )  
(a) AT 25°C: LESS THAN OR EQUAL TO 1.45 MICROSECONDS.  
(b) AT 0°C: LESS THAN OR EQUAL TO 1.25 MICROSECONDS.  
(c) AT 70°C: LESS THAN OR EQUAL TO 1.75 MICROSECONDS.

**B. QUALITY ASSURANCE PROVISIONS:**

- (1) SUPPLIER SHALL CONFORM TO THE REQUIREMENTS OF ND 1015404, CLASS 3.

(2) ACCEPTANCE INSPECTION:

(a) CORES SHALL BE TESTED FOR ELECTRICAL REQUIREMENTS 100 PERCENT AT 25°C. A 1 PERCENT SAMPLE SHALL BE TESTED FOR ELECTRICAL REQUIREMENTS AT 0°C AND 70°C. IN ACCORDANCE WITH MIL-STD-105, .25 PRECENT AQL.

2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

REVISIONS 00467 2-27-63			
SYM	DESCRIPTION	DATE	APPROVAL
-	SEE PROCUREMENT NOTE NO. 3		
A	REVISED PER TDRR 00513	16/9/63	WK
B	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 03137	12SEP63	WK.
C	REVISED PER TDRR 18624	5/11/63	WK

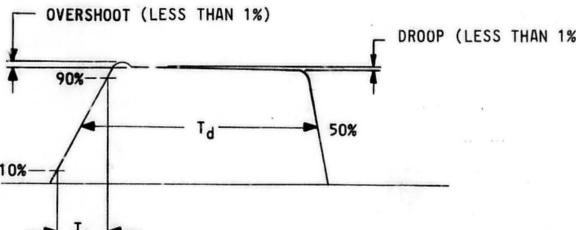


FIG. 1 CURRENT PULSE

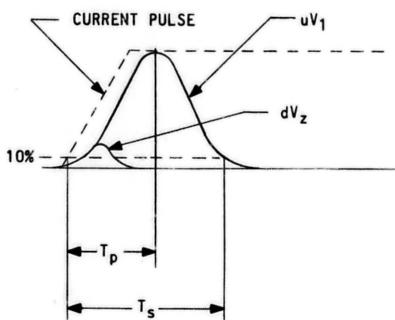


FIG. 2 VOLTAGE RESPONSE OF CORE

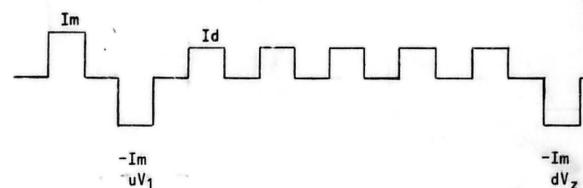
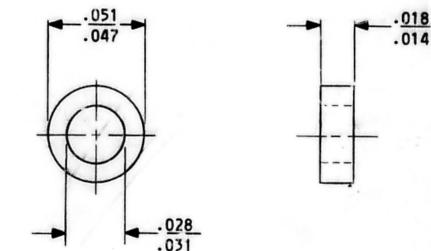


FIG. 3 CURRENT PULSE SEQUENCE

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FILE NO.
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS. DWG. NO. <u>CONTRACT</u>		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DRAWN <u>R. WHEELER</u> DATE <u>24DEC62</u> CHECKED <u>DM</u> , SLEEFER <u>11 JAN 63</u> APPROVAL <u>Al Mayo</u> <u>3-27-63</u> APPROVAL <u>Cedric C. Hall</u> <u>10 Jan 63</u>		<b>MAGNETIC CORE, FERRITE</b> <b>SPECIFICATION CONTROL DRAWING</b>	
NASA APPROVAL <u>W. J. Rehm</u> <u>2-2-7-63</u> <u>W. J. Rehm</u> <u>27 Feb 63</u>		CODE IDENT NO. <b>80230</b>	SIZE <b>C</b>
MIT APPROVAL		SCALE <b>NONE</b>	WT
		SHEET <b>I</b>	OF <b>I</b>

PROCURE ONLY FROM APPROVED SOURCES LISTED IN  
ND 1002034 FOR THIS DRAWING.