

REVISIONS						
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD APPD

CHART 1  
MAGNETIC PROPERTIES OF FERRIMIC BODIES

PROPERTIES	SYMBOLS	UNIT	MATERIAL							
			H	H-1	H-3	0-3	T-1	Q-1***	Q-2	
Initial Perm.	$\mu_0$	-	850 @ 1 mc/s	550 @ 1 mc/s	550 @ 1 mc/s	1500 @ 100 kc/s	2000 @ 100 kc/s	125 @ 1 mc/s	40 @ 1 mc/s	
* Max. Perm.	$\mu_{max}$	-	4300	3800	3800	4000	3600	400	115	
* Sat. Flux Density	$B_s$	Gauss	3400	2800	2800	4500	4400	3300	2400	
* Residual Mag.	$B_r$	Gauss	1470	1500	1500	1600	1000	1800	750	
* Coercive Force	$H_c$	Oersted	.18	.35	.35	0.15	0.18	2.1	4.7	
Temp. Coef., of initial Perm.		%/°C.	.66	.80	.80	0.32	**	.10 max.	.10 max.	
Curie Point		+°C.	150	125	125	190	180	350	450	
Vol. Resistivity		ohm-cm	Medium	Medium	High	Low	Low	High	High	
Loss Factor:										
0.1 mc/sec.			-	-	-	0.000033	0.000025	-	-	
1.0 mc/sec.		1	0.00030	.0004	-	-	-	0.00002	-	
5.0 mc/sec.			-	.0010	-	-	-	-	-	
10.0 mc/sec.		$\mu$ oQ	-	-	-	-	-	0.000016	0.000085	
50.0 mc/sec.			-	-	-	-	-	-	0.00017	

\* Measurements made on D.C. Ballistic Galvanometer with H max - 25 oersteds. Above data is based on nominal values.  
 \*\*Cannot be simply expressed as approximate linear change. Curves available on request. \*\*\*Q-1 and Q material have identical magnetic characteristics.

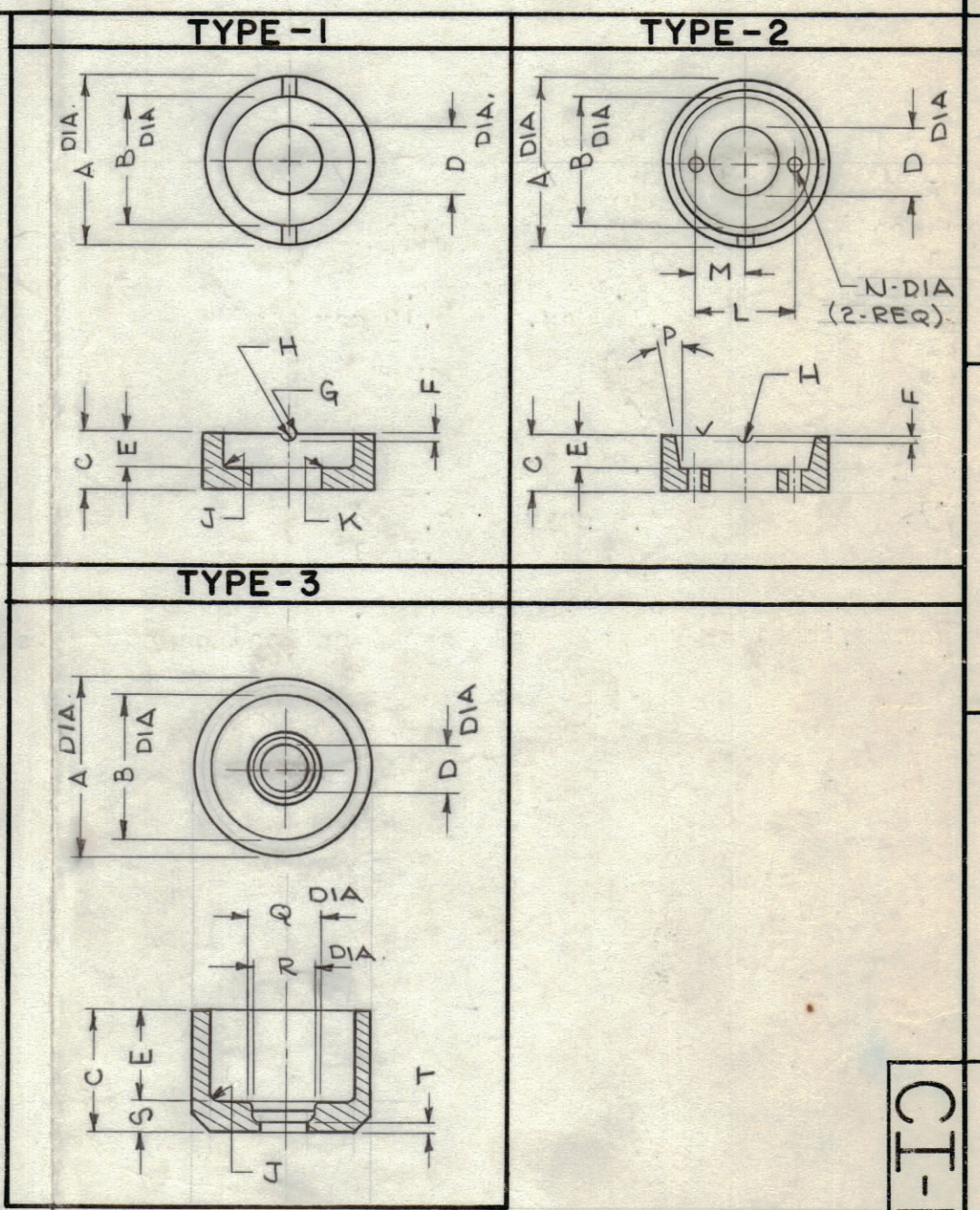
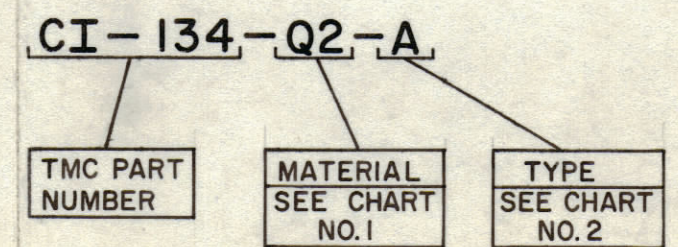


CHART 2  
IF CUP CORES

TMC TYPE	MFG. NO.	PICTORIAL TYPE	A	B	C	D	E	F	G	H	J	L	M	N	±2° P	Q	R	S	T	AVAILABLE IN MATERIAL
A	CF-301	1	.450 ±.007	.370 ±.007	.175 ±.007	.166 ±.003	.130 ±.005	.050 ±.010	1/64R Ref.	3/64R ±.006	Max. .020									Q-1
B	CF-302	1	.450 ±.007	.370 ±.007	.175 ±.007	.183 ±.003	.130 ±.007	.050 ±.010	1/64 Ref.	3/64R ±.006	Max. .020									Q-1
C	CF-303	1	.450 ±.012	.370 ±.015	.295 ±.007	.208 ±.003	.240 ±.007	.050 ±.010	1/64R Ref.	3/64R ±.006	Max. .020									Q-1
D	CF-304	3	.500 ±.012	.410 ±.007	.340 ±.010	.167 ±.003	.260 ±.007				1/32R Max.				.253 ±.005	.203 ±.005	.080 ±.008	.032 ±.003		Q-1
E	CF-305	1	.505 ±.007	.412 ±.007	.187 ±.010	.230 ±.003	.130 ±.010	3/64 ±.010	1/64R Ref.	1/32R ±.006	Max. .020									Q-1
F	CF-306	2	.937 ±.009	.718 ±.007	.312 ±.005	.380 ±.005	.175 ±.010	1/32 ±.010				.552 ±.005	.276	.062 ±.005	2°					Q-1

NOTE: 1 - MECHANICAL TOLERANCES: (For Type 2 only.) When two cup cores are placed together the air gap between mating surfaces shall not exceed .0005 (✓) surfaces ground. Tolerances for all other types listed in table.  
 2 - MAGNETIC TOLERANCES: ±20% of values published in chart 1. Effective permeability tolerance is ±5%, as measured with a standard test coil on a Boonton 260A Q Meter.

TMC PART NUMBER TO BE IN THE FOLLOWING FORM:



REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
GELLMAN LIST OF MATERIAL				
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
FINISH		TITLE CORE, CUP		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		DRAWN G. Jensen CHECKED A. Terai ELECT. DES. MECH. DES.	DATE 2-6-64 DATE 2-7-64 DATE DATE	FINAL APPROVAL  DATE DATE DATE
DECIMALS .X ± .05 .XX ± .01 .XXX ± .005		FRACTIONS ± 1/64 ANGLES ± 0° 30'		TOLERANCES SHEET REV. LTR.

STANDARD DRAWING		
QTY./UNIT	MODEL USED ON	ASSY. NO.
SCALE	CODE	
A	C	S401-206
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NOTES

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