

QPL M27-372
TRANSFORMERS AND INDUCTORS M27/372
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTOR, SURFACE MOUNT, LEADLESS

REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

Design and construction:

Dimensions and configurations: See figure 1.

Case: Grade 5, encapsulated.

Terminals: The terminals shall be tin-lead plated phosphor bronze.

Weight: 1.25 ounces, maximum.

Altitude: 70,000 feet, maximum.

Operating temperature range: -55°C to +125°C.

Resistance to soldering heat: MIL-STD-202, method 210 test condition B. Depth of immersion shall be the entire mounting surface for 4 to 5 seconds.

Bond Strength: MIL-STD-883, method 2011, test condition F.

Force: 2 pounds.

Barometric pressure: MIL-STD-202, method 105, test condition C, (70,000 feet), test voltage 100 V rms.

Insulation resistance: MIL-STD-202, method 302, 1,000 megohms minimum at 100 V dc.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage:

At sea level: 200 volts rms.

At reduced barometric pressure: 100 volts rms.

Vibration (high frequency): MIL-STD-202, method 204, test condition D.

Moisture resistance: MIL-STD-202, method 106, method of mounting shall be on a test substrate that provide test pieces on inch minimum separation.

Temperature rise: The temperature rise shall be 35°C over ambient temperature of 90°C.

Marking location: Marking shall be on top of the case.

Part or Identifying Number (PIN): M27/372-(dash number from table I), RAYCO (04620), 5T8290-(dash number from table I) and date code.

Qualification: Qualification testing and approval to M27/372-40 shall be sufficient to grant qualification approval to M27/372-01 through M27/372-40 inclusive.



QPL M27-372

**TRANSFORMERS AND INDUCTORS M27/372
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTOR, SURFACE MOUNT, LEADLESS**

TABEL I. ELECTRICAL CHARACTERISTICS.

5T8290-XX	SERIES			PARALLEL			CONFIGURATION	POWER RATING (mW)
	INDUCTANCE ± 10 PERCENT (mH)	RATED DC CURRENT (mA)	DC RESISTANCE (MAX) (OHM)	INDUCTANCE ± 10 PERCENT (mH)	RATED DC CURRENT (mA)	DC RESISTANCE (MAX) (OHM)		
01	0.100	300	1.60	0.025	600	0.400	A	125
02	0.100	600	0.96	0.025	1200	0.240	B	250
03	0.100	780	0.37	0.025	1560	0.093	C	300
04	0.100	1350	0.21	0.025	2700	0.053	D	450
05	0.250	200	3.11	0.062	400	0.778	A	125
06	0.250	400	1.98	0.062	800	0.495	B	250
07	0.250	530	0.82	0.062	1060	0.205	C	300
08	0.250	930	0.41	0.062	1860	0.103	D	450
09	0.500	150	6.14	0.125	300	1.535	A	125
10	0.500	300	3.35	0.125	600	0.838	B	250
11	0.500	380	1.62	0.125	760	0.405	C	300
12	0.500	660	0.82	0.125	1320	0.205	D	450
13	0.750	120	9.45	0.187	240	2.363	A	125
14	0.750	250	5.20	0.187	500	1.300	B	250
15	0.750	310	2.50	0.187	620	0.625	C	300
16	0.750	540	1.25	0.187	1080	0.313	D	450
17	1.000	95	12.85	0.250	190	3.213	A	125
18	1.000	200	6.90	0.250	400	1.725	B	250
19	1.000	270	3.37	0.250	540	0.843	C	300
20	1.000	470	1.87	0.250	940	0.468	D	450
21	2.000	75	25.60	0.500	150	6.400	A	125
22	2.000	150	12.20	0.500	300	3.050	B	250
23	2.000	190	6.75	0.500	380	1.690	C	300
24	2.000	330	3.62	0.500	660	0.910	D	450
25	3.000	60	38.40	0.750	120	9.600	A	125
26	3.000	120	18.30	0.750	240	4.580	B	250
27	3.000	160	10.12	0.750	320	2.530	C	300
28	3.000	270	5.50	0.750	540	1.380	D	450
29	5.000	45	64.00	1.250	90	16.000	A	125
30	5.000	90	30.40	1.250	180	7.600	B	250
31	5.000	120	16.87	1.250	240	4.220	C	300
32	5.000	210	9.12	1.250	420	2.280	D	450
33	7.500	30	96.00	1.875	60	24.000	A	125
34	7.500	70	46.00	1.875	140	11.500	B	250
35	7.500	100	25.37	1.875	200	6.350	C	300
36	7.500	170	13.75	1.875	340	3.440	D	450
37	10.000	20	128.00	2.500	40	32.000	A	125
38	10.000	50	61.00	2.500	100	15.250	B	250
39	10.000	80	33.75	2.500	160	8.440	C	300
40	10.000	140	18.25	2.500	280	4.570	D	450

QPL M27-372
TRANSFORMERS AND INDUCTORS M27/372
(AUDIO, POWER AND HIGH-POWER PULSE),
INDUCTOR, SURFACE MOUNT, LEADLESS

FIGURE 1. DIMENSIONS AND CONFIGURATIONS

SIZE	E max	F max	G ^{1/}
	MILLIMETERS (INCHES)	MILLIMETERS (INCHES)	MILLIMETERS (INCHES)
A	6.60 (0.260)	5.84 (0.230)	2.16 (0.085)
B	10.41 (0.410)	5.84 (0.230)	3.43 (0.135)
C	10.41 (0.410)	7.87 (0.310)	3.43 (0.135)
D	13.59 (0.535)	7.87 (0.310)	5.08 (0.200)

^{1/} THE TOLERANCE FOR ALL DIMENSIONS SHALL BE $\pm 0.25\text{mm}$ (0.010 inch).

mm	inches
0.25	0.010
0.64	0.025

NOTES:

1. DIMENSIONS ARE IN MILLIMETERS.
2. INCH-POUND EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY.
3. THE US GOVERNMENT PREFERRED SYSTEM OF MEASUREMENT IS THE METRIC SI SYSTEM.
 HOWEVER, SINCE THIS ITEM WAS ORIGINALLY DESIGNED USING INCH-POUND UNITS OF MEASUREMENT,
 IN THE EVENT OF CONFLICT BETWEEN THE METRIC AND INCH-POUND UNITS, THE INCH-POUND UNITS
 SHALL TAKE PRECEDENCE.

