

Synchro, Torque Differential Transmitter, Type 23TDX4C

FSC 5990

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This specification is approved for use by all Departments and Agencies of the Department of Defense. The requirements for acquiring the Synchros described herein shall consist of this specification and the latest issue of MIL-S-20708.

TABLE I. Requirements.

Requirement	Value	Unit	Tolerance
Frequency	400	Hz	$\pm 1\%$
Primary Voltage	78	volts	$\pm 1\%$
Primary Current	866.0	milliamps	maximum
Primary Power	7.0	watts	maximum
Impedance:			
Z _{so}	90–112	ohms	min.–max.
Z _{rs}	11.0–15.0	ohms	min.–max.
Impedance Angle:			
Z _{so}	84.0–88.0	degrees	min.–max.
Z _{rs}	47.0–53.0	degrees	min.–max.
Transformation Ratio	1.154	-----	$\pm 2\%$
Phase Shift (Lead)	2.0	degrees	± 1.0
Electrical Error	8.0	minutes	maximum
Torque Gradient	0.16	ounce–inches per degree	minimum
Friction Torque	0.20	ounce–inches	maximum
Radial Play	0.0010	inches	maximum
End Play	0.0025	inches	± 0.0020
Temperature Rise	25.0	degrees (C)	maximum
Variation of Voltage (+10%) and Freq. (–5%)	7.84	watts	maximum