7545M Series

CERAMIC CHANNEL ELECTRON MULTIPLIER FOR FINNIGAN MAT GCQ®/LCQ® MASS SPECTROMETERS

HARRIS®

TECHNOLOGY TO CONNECT, INFORM AND PROTECT™

7545M, 7545MH5

Features

- Exclusive mounting hardware permits fast replacement
- Background signal less than instrument baseline noise means microphonics are virtually eliminated
- Capable of high output current – greater than 10 µA
- Vacuum bakeable at 350˚C
- Operable to $7x10^{-4}$ torr (He) and 200˚C

Benefits

- Extended multiplier life
- Increased sensitivity
- Increased linear dynamic range
- Gain tailored for use in Finnigan MAT Model GCQ®/LCQ® mass spectrometers
- Capable of absorbing high thermal and physical shock

The Model 7545MH5 is Harris' channel electron multiplier (CEM) assembly used in Finnigan MAT GCQTM and LCQTM mass spectrometers. The monolithic ceramic construction and advanced ion-optical design significantly extends multiplier life, enhances sensitivity, and offers greater linear dynamic range. Its exclusive mounting both speeds multiplier replacement and assures perfect alignment.

SPECIFICATIONS: **7535M SERIES**

OPERATING PARAMETERS				
Supply Voltage	Min. 1200, Max. 3000 Vdc			
Vacuum	Max. $7x10^{-4}$ torr (He)			
CEM Power Dissipation	Max 200 mW			
Average Anode Current	Max 15 µA			
Resistance @ 10Vdc: **Total (R_T)** **Anode Bias (R_A)**	Min. 25, Max 40 MΩ Min. 1.5, Max 2.5 %R_T			
Thermal Coefficient of Resistance: **(TCR_{RT}, TCR_{RA})**	Max -0.6%/°C			
Gain[2] (typ; see fig. 1)	1200 Vdc $1x10^5$	1500 Vdc $6x10^5$	1800 Vdc $5x10^6$	
Background Signal: **Output Dark Pulses (max)** **Output Dark Current (typ)**	.05 $8x10^{-16}$	.05 $3x10^{-15}$	.05 $4x10^{-14}$	counts/sec amps

Notes: (1) For operation at elevated ambient temperatures, Harris can provide derating information. (2) Values specified for electron gain are those existing at the time of shipment. Gain typically decreases with use. Periodic supply voltage increases are required to maintain the gain above a specific level. Multipliers are shipped in sealed bags containing dry nitrogen. It is recommended that the seal not be broken until use.

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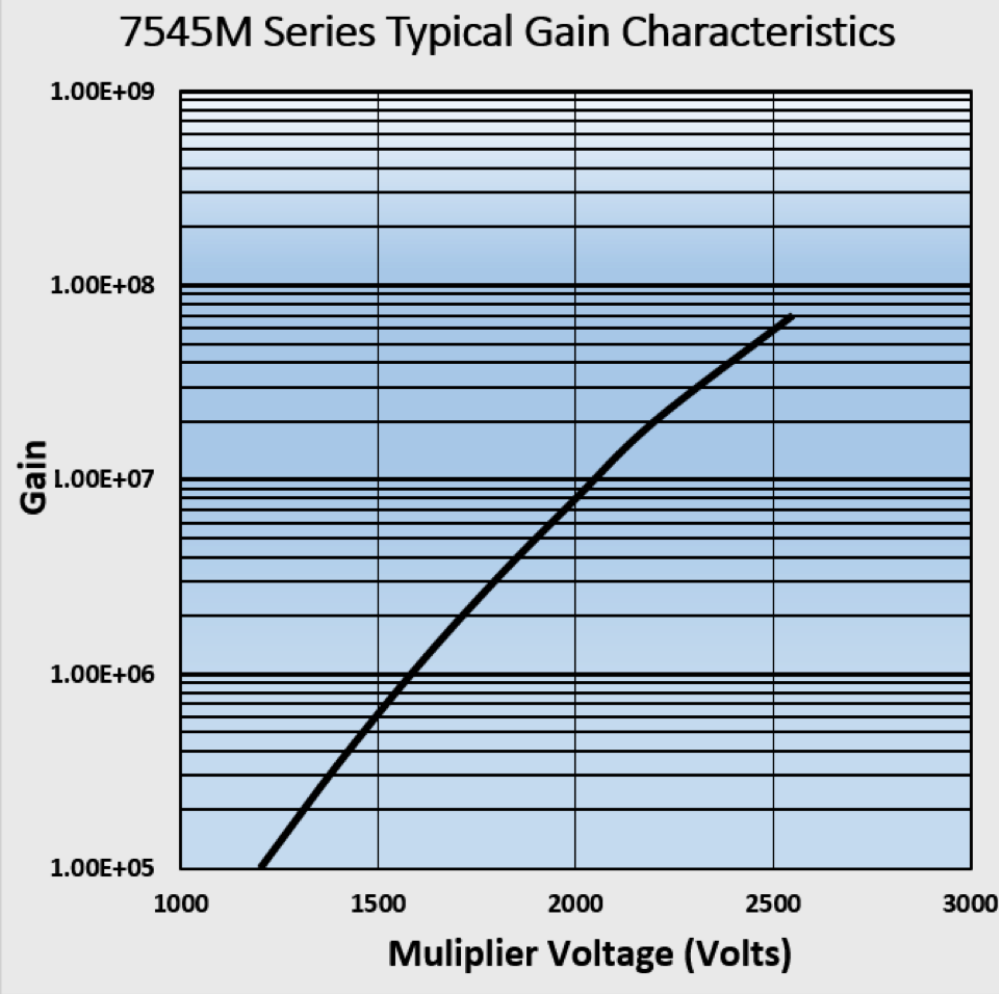

About Harris Corporation
Harris Corporation is a leading technology innovator, solving our customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports customers in more than 125 countries, has approximately $8 billion in annual revenue and 22,000 employees worldwide. The company is organized into four business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems, and Critical Networks.

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