QUALITY ASSURANCE DATA SHEET

GEM Series HPGe (High-Purity Germanium) Coaxial Detector System

Model and Serial Numbers

Detector Model No. GEM-60195-PLUS-P
Cryostat Configuration PopTop
Dewar Model
Preamp Model 232P
Preamp S/N 305
H.V. Filter Model 138
H.V. Filter S/N 9682

Important Reference Data

Ship Date 08/30/04
Serial No. 38-TP40852A

When calling Customer Service, always refer to this Detector Serial No.

1010705

Cryogenic Information

Dewar Capacity ___ Static Holding Time __ Detector Cool-Down Time __

Dimensions

Crystal Diameter 81.3 mm
Crystal Length 55.5 mm
End Cap to Crystal 4 mm

Absorbing Layers

Aluminum 1.00 mm
Magnesium __ mm
Inactive Germanium 700 μm

High Voltage Bias

Recommended Operation Bias, POSITIVE 4000 V

Performance Specifications*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Warranted</th>
<th>Measured</th>
<th>Amplifier Time Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution (FWHM) at 1.33 MeV, 60Co</td>
<td>2.15 keV</td>
<td>1.99 keV</td>
<td>6 μs</td>
</tr>
<tr>
<td>Peak-to-Compton Ratio, 60Co</td>
<td>56</td>
<td>68.9</td>
<td>6 μs</td>
</tr>
<tr>
<td>Relative Efficiency at 1.33 MeV, 60Co</td>
<td>48 %</td>
<td>62.1 %</td>
<td>6 μs</td>
</tr>
<tr>
<td>Peak Shape (FWHM), 60Co</td>
<td>2.00</td>
<td>1.92</td>
<td>6 μs</td>
</tr>
<tr>
<td>Peak Shape (FWFM/FWHM), 60Co</td>
<td>3.00</td>
<td>2.65</td>
<td>6 μs</td>
</tr>
<tr>
<td>Resolution (FWHM) at 122 KeV, 57Co</td>
<td>1100 eV</td>
<td>707 eV</td>
<td>6 μs</td>
</tr>
</tbody>
</table>

Other Capsule NUCA# 7125

Data Certified By LAPhllips Date 08/30/04

*Measured at a nominal rate of 1000 counts/s unless otherwise specified.