HAMAMATSU

PRELIMINARY DATA FEB. 1998

R5150-10

MULTIPLIER

The R5150-10 is a new family of Hamamatsu ion detector. Thanks to Hamamatsu unique electron trajectory simulation technology, it delivers high gain, fast response and wide dynamic range. A newly developed secondary emitting surface also ensures long operating life and less gain deterioration even after being exposed to air. The R5150-10 also offers stable, reliable operation even at low vacuum levels. The electron optics in the R5150-10 is not affected when used in conjunction with conversion type dynodes, so that high sensitivity is maintained. The optional holder allows easy installation and replacement of the R5150-10 in mass spectrometers. Even with all these features, the price is still reasonable, making the R5150-10 ideal as a replacement detector for CEM (channel electron multiplier).

FEATURES

- High gain
- Wide dynamic range
- Long life

- Fast response
- High price performance
- Stable operation even after expossed to air

SPECIFICATIONS

Parameter		Value	Unit
Supply Voltage (at a gain of 10 ⁷)		2000	V
Dark Counts (at supply voltage of 2000V)		0.02	cps
Rise Time (at supply voltage of 2000V)		2.5	ns
Maximum Ratings	Operating Vacuum Level	10-2	Pa
	Bake-out Temperature	350	°C

Figure 1: Typical Gain

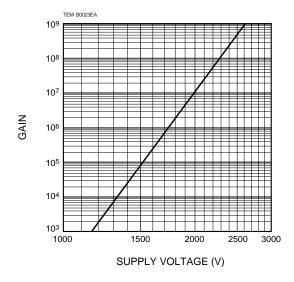
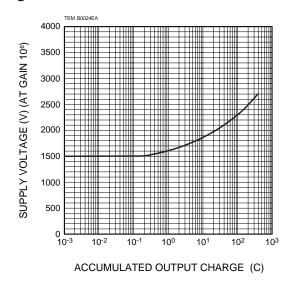


Figure 2: Life Characteristics



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Figure 3: Output Waveform

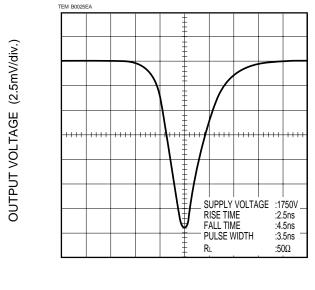
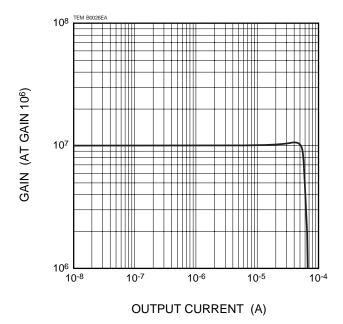
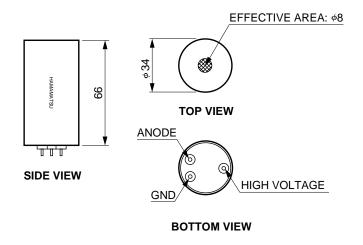


Figure 4: Gain Variation vs. Output Current



TIME (2.5ns/div.)

Figure 5: Dimensional Outline (Unit: mm)



Holder E5174 (option)

22

AMOUNTING HOLE 4-\psi_3.5

TEM A0015EA

TACCA0171EA

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