

GM200-3 Gate Module

Features

- Photocathode gate module
- 3 ns gate time (FWHM)
- 1 ns rise/fall time
- 200 KHz repetition rate
- Trigger input
- N version gated normally off
- P version gated normally on



Parameters

	Minimum	Maximum
Gate Time T_g	3 ns FWHM*	Unlimited (d.c.)**
Repetition Rate	0 Hz "Single Shot"	200 KHz Self-limited
ON Voltage Output	-200 V	
OFF Voltage Output	+50 V	
Trigger Input	+3.2 V into 50 Ω	+5.5 V into 50 Ω
Power Supply	+10 V	+14 V
Supply Current @ +12 V	175 mA (No Trigger)	550 mA (200 KHz 250 pF load) 1 A inrush current
Jitter	50 ps r.m.s.	
Maximum Capacitance Load	250 pF	
Minimum Resistance Load	10 M Ω	

**Actual gate time is dependent on the detector. This gate time is the minimum that the GM200-3 can provide.*
*** Large gate times > 500 μ s trigger a holding mode that adds 5 μ s to the gate window.*

Mechanical

	Housed	Bare PCB
Height	26 mm	13 mm
Width	56 mm	38 mm
Length	86 mm (106 mm including connectors)	80 mm (106 mm including connectors*)
Weight	115 g	45 g
Trigger Input Connector	SMA	
Power Supply Connector	SMB	
Gate Pulse Connector	SMA	

** Right-angled connectors would reduce the total length to 100 mm and enable easier access. Available on request.*

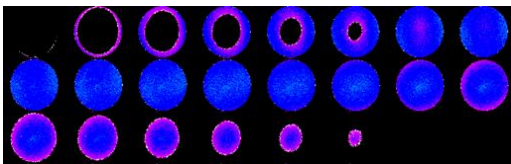
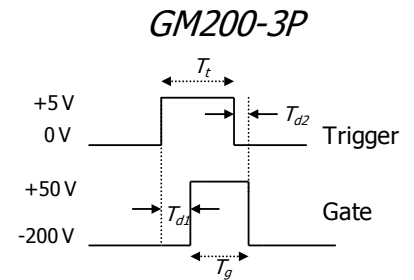
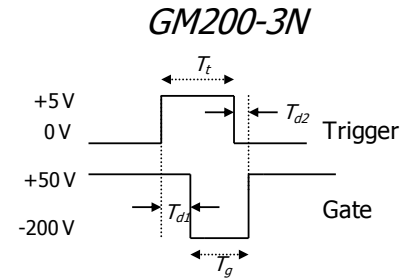
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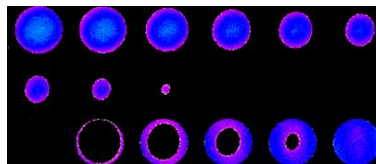
Datasheet No.	DS009
Issue	01
Date	14 January 2011

Typical Timing Parameters

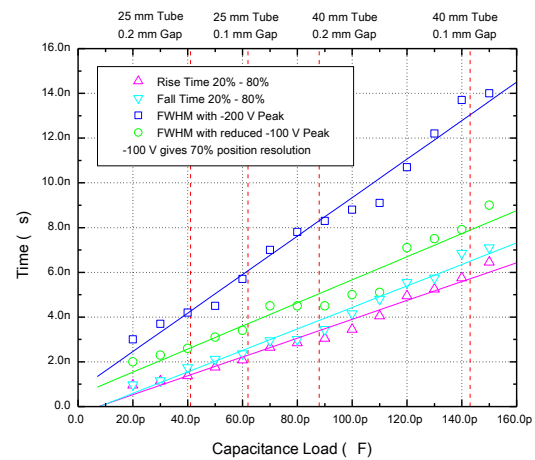
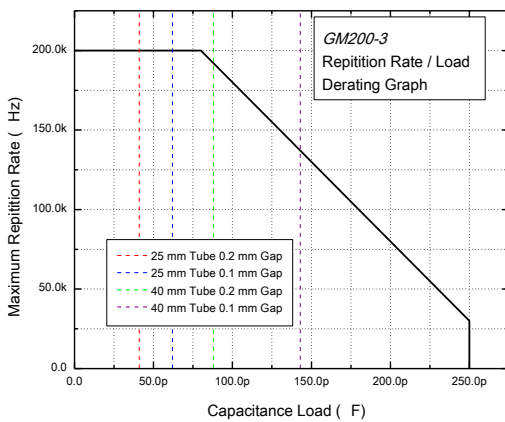
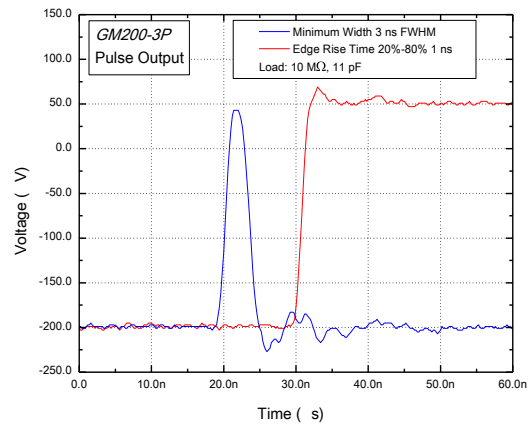
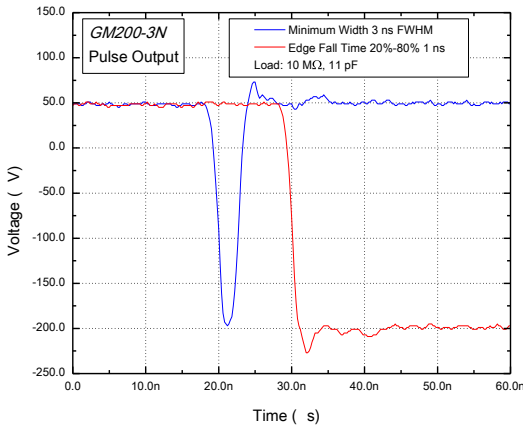
Leading Edge Propagation Delay	Td1	50 ns (40 to 60 ns optional)
Trailing Edge Propagation Delay	Td2	40 ns
Trigger / Gate Offset Time Tt - Tg	Td1 - Td2	10 ns (0 to 20 ns optional)
Dead Time after Trailing Edge		100 ns
Minimum Trigger Width	Tt	6 ns



GM200-3N Laser Walkthrough
200 ps/frame



GM200-3P Laser Walkthrough
200 ps/frame



Photek Ltd reserves the right to update and improve this specification without prior notice

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