Appendix B

3100M/3100R/3151B/3152B Module Specifications

Input Characteristics

Number of Channels	Single channel (3201A) or dual channel (3202A)
Inputs	2 for each channel
Connectors	Channel 1: BNC and SMB Channel 2: SMB and SMB
Impedance	50 Ω , 75 Ω , or 1 M Ω (configured at factory)
Coupling	DC
Damage Level	12 Vp-p (-6 V to +6 V peaks)
Frequency Range	DC to 15 MHz (full power bandwidth) when loaded with matching output impedance

Output Characteristics

General

Connector	Channel 1: BNC Channel 2; SMB
Impedance	50 Ω, 75 Ω, or 600 Ω (configured at factory)
Coupling	DC
Protection	Short-circuit, 10 seconds
Gain	x10, fixed (can be special-ordered with different gain setting)
Polarity	Non-inverting
Amplitude	0 to 20 Vp-p into matching impedance 0 to 40 Vp-p into high impedance

Square Wave Characteristics

Transition Time	<22 ns
Aberrations	<7%

Sine Wave Characteristics

Bandwidth	15 MHz, at 20 Vp-p (-3dB)
Accuracy	$\pm(3\%$ of full-scale amplitude range + 25 mV), square wave at 1 kHz

Flatness (10Vp-p)	$\pm 5\%$ of amplitude to 1 MHz;
	$\pm 10\%$ of amplitude to 7.5 MHz;
	$\pm 25\%$ of amplitude to 15 MHz
THD (load >100 kΩ)	0.1%, 10 Hz to 100 kHz
Harmonics	<-47 dBc, 100 kHz to 1 MHz (10 Vp-p)
	<-38 dBc, 1 MHz to 10 MHz (10 Vp-p)
	<-30 dBc, 10 MHz to 15 MHz (10 Vp-p)

General

Physical Size	1/2 high, "C" module
Power Requirements	+24 VDC - 350 mA
	-24 VDC - 350 mA
	+12 VDC - 55 mA
	-12 VDC - 55 mA
	<19 W at full power
Signal Ground	Grounded to case ground
EMC Certification	CE marked
Safety	Designed to meet IEC EN61010-1, UL 3111-1
Workmanship Std.	Conform to IPC-A-610D

Environmental

Operating Temperature	0 °C to 50 °C, RH 80% (non-condensing)
Storage Temperature	-30 °C to 80 °C