



# Opti Max2700 Multi-Functional Node and Lid Upgrade Technical Specification

## Opti Max2700 General Node Specifications

<b>Opti Max2700 General Node Specifications</b>	
Number of Active RF/AC Ports	3
Number of Passive RF/AC Ports	2
Number of AC Only Ports	1
Housing Passband, MHz	1002
Port Impedance, $\Omega$	75
AC Current Passing, A (Ports 1,3,4,6)	15
AC Current Passing, A (Ports 2,5)	13
Operating Temperature Range, $^{\circ}\text{C}$	-40 to +60
<b>Forward Path Specifications</b>	
<b>Optical Specifications</b>	
Optical Input Wavelength, nm	1290 to 1600
Optical Input Range, dBm (Note 1)	-3 to +3
<b>RF Specifications</b>	
Operating Passband, MHz	54 to 1002
Output Level @ 1002MHz, Pin=0dBm, 3.5% OMI, dBmV, min.	52
Level Stability, dB, max.	$\pm 1.5$
Gain Slope, dB (Trunk/Bridger)	10/17 $\pm$ 1.0
Flatness @ Gain Slope	$\pm 1.5$
Return Loss, dB, min. (All RF Ports)	16.0
Testpoints	
Forward Output, dB (-20 or -25dB)	$\pm 0.5(54-550) \pm 1.0(551-1002)$
Receiver Input Optical Level	1V/mW $\pm$ 10%
<b>79 NTSC Channel Performance (Notes 2, 3)</b>	
Frequency, MHz	1002/870/550/54
Output Level, dBmV	52/49.5/44/35
Carrier to Noise Ratio, 4MHz, 75 $\Omega$ , 0dB Input, dB	Trunk 55.4, Bridger 55.4
Composite Triple Beat, -dBc	Trunk 77, Bridger 72
Composite 2IM, -dBc	Trunk 68, Bridger 67
Cross Modulation, per NCTA std., -dB	Trunk 72, Bridger 65
Composite Intermodulation Noise, dB (Note 4)	Trunk 80, Bridger 71