

Type		OFN220-FR-1450	OFN220-FR-1470	OFN220-FR-1590	OFN220-FR-1610
Order number		212 199	212 177	212 178	212 179
EAN-Code		4026187199197	4026187199111	4026187199128	4026187199135
Optical node type		Forward path and return path			
Optical characteristics					
Optical input wavelength	[nm]	1540...1560			
Optical input power	[dBm]	-8... 0			
AGC range	[dB]	adjustable -8/ -7 / -6 / -5...0 (default -6)			
Noise current typ.	[pa/√Hz]	≤ 5			
Optical connector type		SC/APC; other on request			
Fibre type		Single mode 9/125			
RF characteristics forward path					
Frequency range (flexible duplex filter)	[MHz]	110...1218			
Flatness (within AGC range)	[dB]	110 ..862 MHz: ±1.0; 862 ..1218 MHz: ±1.5			
Typ. RF level (MER > 42,5 dB, BER < 1E-9)	[dBμV]	106			
Interstage attenuation A1	[dB]	0...18, 1 dB steps			
Interstage equalizer E1	[Ω]	0...15, 1 dB steps			
Output Return Loss	[dB]	> 16 -1.5 dB/Oct.			
Output Impedance	[dB]	75			
RF testpoint	[dB]	-20 ± 1,0			
Optical characteristics return path					
Optical Wavelength (each wavelength base type can set to channel 1 / 2 / 3 / 4)	[nm]	1450	1470	1590	1610
Channel stepping (sub-wavelength setting)	[nm]	0,5 (4 channels to be chosen)			
Optical Power	[dBm]	+3,0 ± 1,0 (DFB Laser)			
Flatness	[dB]	±1.0			
Fibre type		Single mode 9/125			
Burst mode transmission parameters (SCTE_174_2010): - Max. Laser turn on time - Max. Laser turn off time - Laser turn on level - Laser turn off level	 [μs] [μs] [dBμV] [dBμV]	 ≤ 1,3 ≤ 1,6 68,0 ± 1,0 58,0 ± 1,0			
RF characteristics return path					
Recommended RF input level / channel	[dBμV]	70 (ATT set to 0 dB / OMI 15%, with ATT to 6 dB OMI 7.5%)			
Frequency range	[MHz]	5 .. 85			
Attenuator A2	[dB]	0...18, 1 dB steps			
Test Port @ Return Laser	[dB]	-20			
Return Loss	[dB]	> 16			
Common data					
Power supply	[VAC]	Mains: 150...265 / 50-60			
Surge protection RF ports		4 (EN61000-4-5, 1,2/50 μs pulse)			
Chassis type		diecast housing			
IP Protection class		IP 41			
RF Output connector / Test connector		F-female			
Power consumption	[W]	≤ 18			
Weight	[kg]	1,5			
Dimension (L x W x H)	[mm]	220 x 175 x 60			
Ambient temperature	[°C]	-20...+55			