



Product Specification for JDSU model # 10024180
Customer: Alcatel USA

Description:

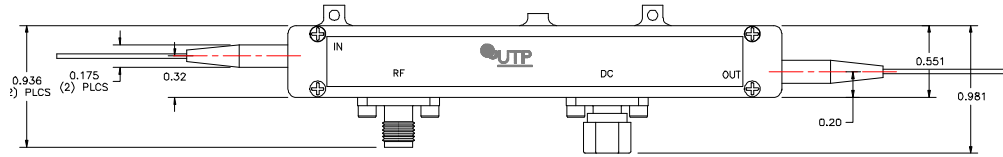
10Gb/sec, zero-chirp, x-cut lithium niobate data modulator with single drive input. The RF drive of the device is internally matched to a 50 ohm input through a Wiltron K connector. A separate SMA connector is supplied to bias the device.

GENERAL	
Material	LiNbO ₃
Crystal orientation	x-cut, y-propagating
Electrical connectors (package)	RF port: Wiltron K DC port: SMA
Package type	Non-hermetic
Fiber type	Input: Fujikura Panda (PMF) Output: Corning SMF-28
Fiber length (with connectors)	1000 ± 50 mm. Measured from edge of package to tip of connector ferrule.
Cabling type	900 μm diameter loose tube
Input fiber launch axis	slow (parallel to the stress rods)
Connector type	Input: SC/APC-PM Output: SC/PC
Qualification reference	Bellcore 468
ABSOLUTE	
Input optical power	50 mW maximum
Operating temperature	0°C minimum, 70°C maximum
Storage temperature	-40°C minimum, 85°C maximum
OPTICAL	
Operating Wavelength (nm)	1530 to 1565
Insertion loss, typ (dB)	4.7
Insertion loss, max (dB)	5.0
On/off extinction ratio (dB).	≥ 20
Measured @ ≤ 100 kHz	
Optical return loss, (dB)	≥ 50
ELECTRICAL	
RF port	
DC voltage, max (V)	0
Maximum power, continuous (dBm)	24
PRBS drive voltage, V _{peak-to-peak} , typical (V) ¹	5.8
Low freq. V _π (≤ 100 kHz) , max (V)	6.8
S ₁₁ , 130 MHz to 14GHz (dB)	≤ -10
S ₂₁ Bandwidth (GHz)	≥ 10
Measured @ -3dB relative to 130 MHz	
Bias port	
V _π , max (V)	8
Measured @ ≤ 100 kHz.	
Biased to slope	Positive
Impedance (KΩ)	>100

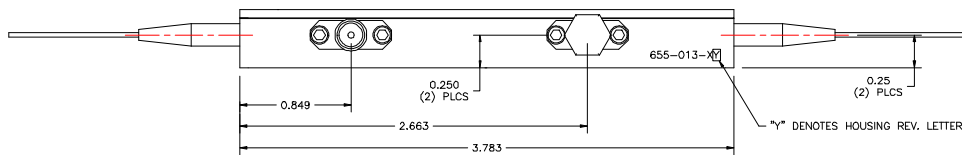
Notes:

1 - Value dependent on driver ckt design and/or measurement conditions, JDS Uniphase cannot guarantee performance, S-parameter data used as pass/fail.

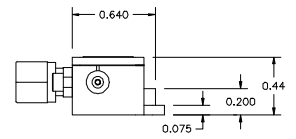
Package Dimensions



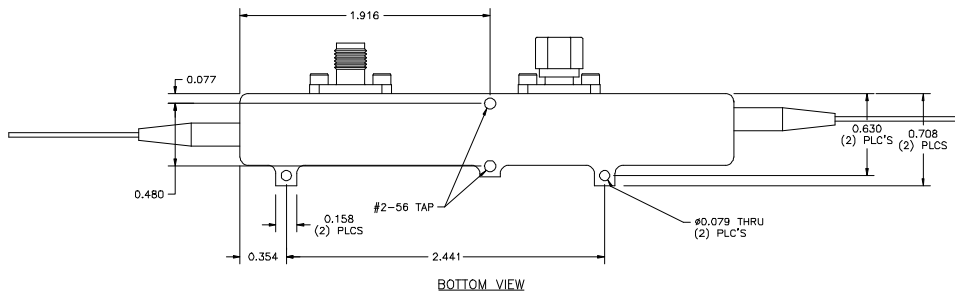
TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW



BOTTOM VIEW

JDS Uniphase will also provide:

1. Marking on device including:
 - JDS Uniphase name and logo.
 - Device model number.
 - Device serial number.
 - Alcatel p/n.
2. Final Test Data Sheet including:
 - Test Wavelength
 - Optical Insertion Loss
 - Slope (set at JDSU factory)
 - Vpi Bias @ $\leq 100\text{KHz}$
 - S11 & S21 plots
3. Packing container including:
 - JDS Uniphase name and logo.
 - Device model number.
 - Device serial number & final test date.
 - Alcatel p/n.