

## TC-EAS Series EA Modulated Laser Light Source

### Product Description

TC-EAS series EA modulated laser light source integrates the functions of DFB laser and EA modulator. It has the characteristics of low chirp, low driving voltage ( $V_{pp}$ : 2~3V), low power consumption and high modulation efficiency. It is widely used in 10Gbps, 40Gbps and other high-speed optical fiber communication systems and microwave photonics.



### Features

- Working wavelength: 1550nm
- Low driving voltage: <2.5V
- High bandwidth: >10G, >40G (optional)
- High extinction ratio: 10dB
- Module, desktop package

### Applications

- 10Gbps high-speed optical fiber communication system
- 40Gbps high-speed optical fiber communication system
- Microwave Photonics



### Performance Parameter

Parameter	Symbol	Minimum Value	Typical Value	Maximum Value	Unit	
Central Wavelength	$\lambda_c$	1530	-	1564	nm	
Output Average Optical Power	$P_{avg}$	-4	0		dBm	
3dB Spectral Width	DI		2	10	MHz	
Wavelength Stability				0.01	nm	
SMR	SMSR	30	45	-	dB	
Power Stability**	$P_{SS}$			$\pm 0.005$	dB/5min	
	$P_{LS}$			$\pm 0.01$	dB/8h	
Modulation Drive Voltage	$V_{pp}$		2.0	2.5	V	
3dB Bandwidth	EAS-10	BW	10	12	-	GHz
	EAS-40		32	35		GHz
Dynamic Extinction Ratio	ER		9	10	dB	
Specification		Desktop		Module		
Dimensions	LxWxH	320×220×90 mm		90×70×18mm		
Power Requirements		AC 220V $\pm$ 10 % 30W		DC +5V GND		
Input Signal Interface		SMA(f) / V(f)				
Output Fiber		Single mode fiber smf-28				

\*\* Test condition: CW, Top=25°C

### Extreme Conditions

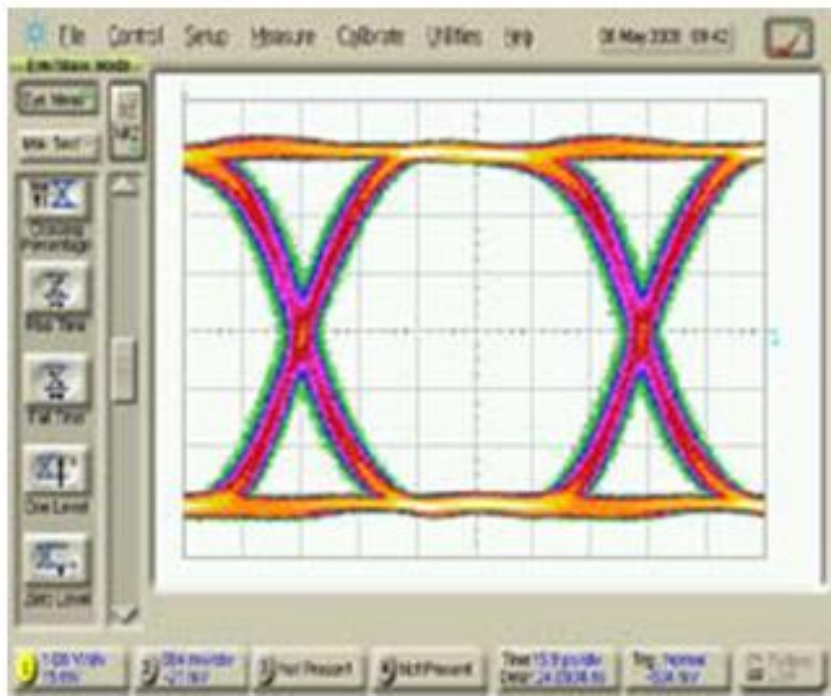
Parameter	Symbol	Unit	Minimum Value	Typical Value	Maximum Value
Operating Temperature	Top	°C	-5		55
Storage Temperature	Tst	°C	-40		85
Humidity	RH	%	5		90



### Ordering Information

TC	EAS	XX	X	XX	XX	X
	Modulation mode: EA modulated light source	Working rate: 10--- 10Gbps 40--- 40Gbps	Package: M---Module D---Desktop	Output Power: 1---1mW	Pigtail: PM---PMF SM---SMF	Fiber optic connector: FP---FC/PC FA---FC/APC SP---user specified

### Test Picture



10Gbps 眼图

