

FEATURES

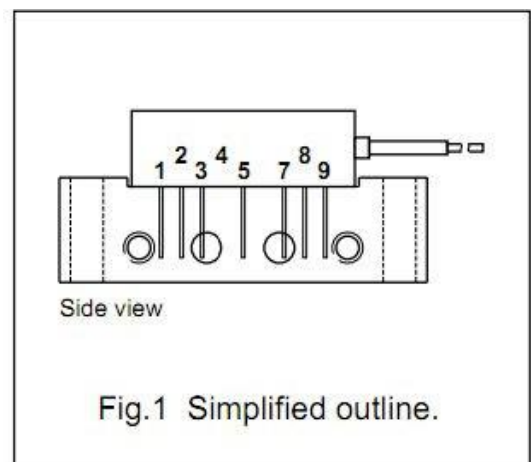
- ◆ Excellent linearity
- ◆ Excellent distortion performance
- ◆ Low input noise
- ◆ Standard CATV outline
- ◆ High output level

PINNING - SOT115U

PIN	DESCRIPTION
1	current monitor
2	common
3	common
5	+V _B of the amplifier
7	common
8	common
9	output

DESCRIPTION

The supply voltage of KF833B0-12 is 12VDC .The module is in a SOT115U package (see Fig.1), has a FC/APC or SC/APC Connector, with a single mode optical input suitable for 1100 to 1650nm wavelengths , a terminal to monitor the photo diode current and an electrical output having a characteristic impedance of 75Ω . Optical power receiving at -8 ~ +2dBm , RF output can achieve 99dBuV/ch(@-2dBm input) with the 40 to 860 MHz frequency range .



HANDLING

Fiberglass optical coupling :

maximum tensile strength= 5 N ;

minimum bending radius=35mm.

LIMITING VALUES

In accordance With the Absolute Maximum Rating System

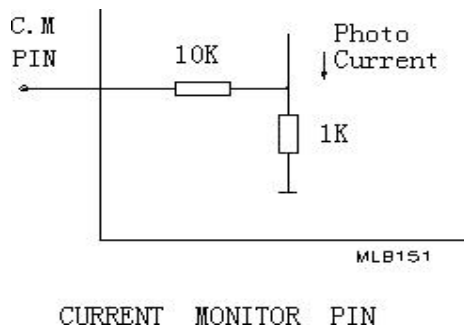
SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNITS
V_B	Supply Voltage		-	12.5	V
P_{in}	Input Optical Power			2	mw
T_{stg}	Storage temperature		-40	+85	°C
T_{op}	Operating temperature		-20	+85	°C
ESD	ESD sensitivity	Human body model; R=1.5K Ω ;C=100pF	500		V

CHARACTERISTICS

T_{mb}=25°C, V_B=12VDC, Z_s=Z_L=75 Ω

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
f	Frequency range	MHz	40		860	
S _λ	Spectral sensitivity	A/W	0.85			λ=1310±20nm
		A/W	0.9			λ=1550±20nm
λ	Optical wavelength	nm	1100		1650	-
V _{c.m}	Voltage of C.M Pin	mV	850			V _B =12VDC, λ=1310nm, 0dBm input
V _o	Output voltage	dBμV		99		m=3.7%, f=860MHz, Optical power receiving at -2dBm
FL	Flatness of frequency response	dB	-	-	±0.75	f=40 to 860 MHz
CTB	Composite Triple Beat	dB	-	-66	-	60 channels flat, m=3.7%, measured at 543.25MHz; Optical power receiving at -2dBm
CSO	Composite Second Order distortion	dB	-	-64	-	
CNR	Carrier to Noise Ratio	dB	-	50	-	Optical power receiving at -2dBm
S ₂₂	Output Return losses	dB	-	-	-11	f=40 to 860 MHz
	Optical input return losses	dB	-	-	-45	
I _{tot}	Total Current Consumption	mA	170	190	210	V _B =12VDC

PHOTODIODE CURRENT MONITOR PIN

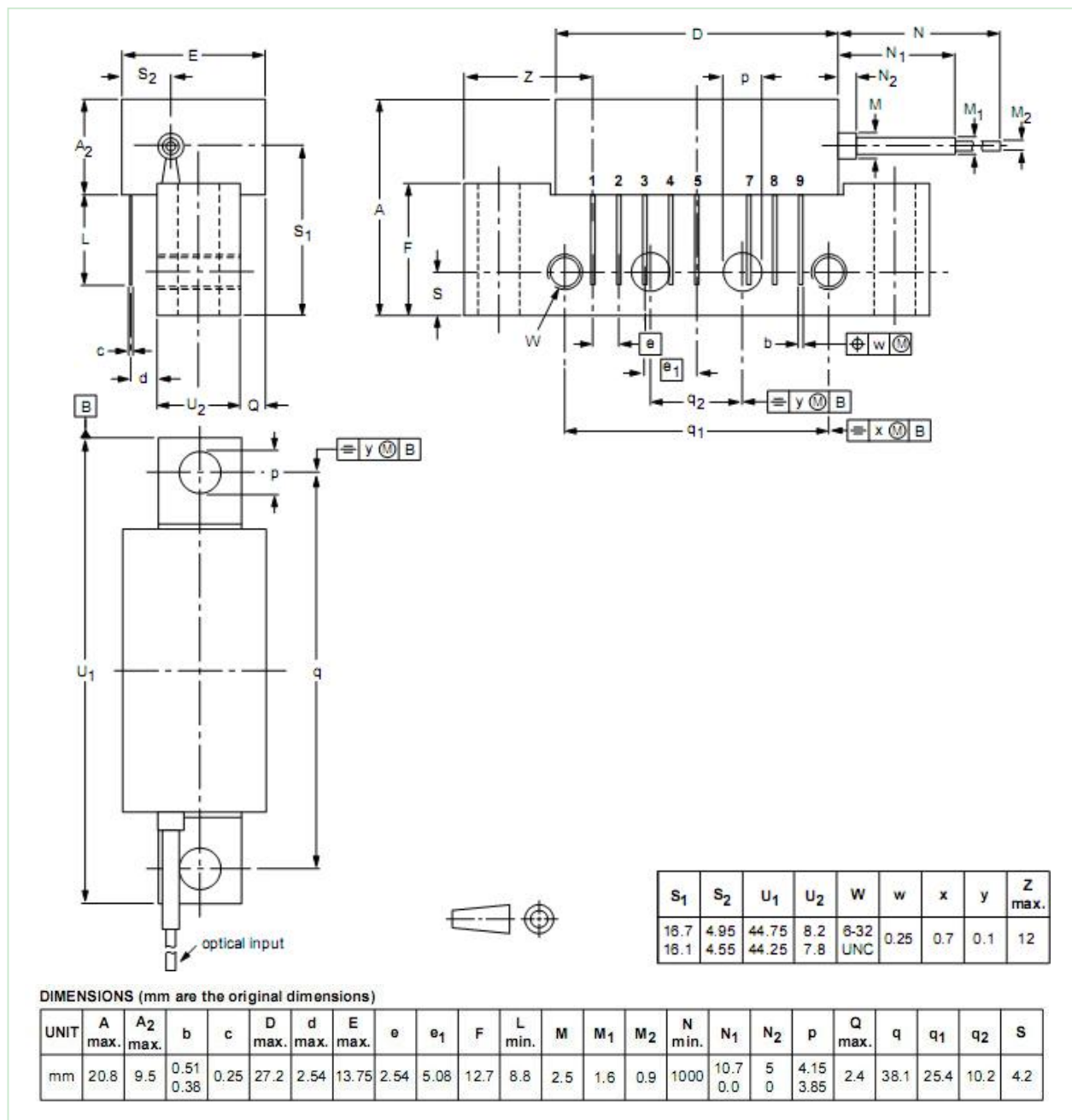


Optical Receiver Integrated Circuit KF833B0-12

PACKAGE OUTLINE

Rectangular single-ended package; aluminium flange; 2 vertical mounting holes; 2x6-32UNC and 2 extra horizontal mounting holes; optical input; 7 gold-plated in-line leads.

SOT115U



UNIT: mm