

**FEATURES**

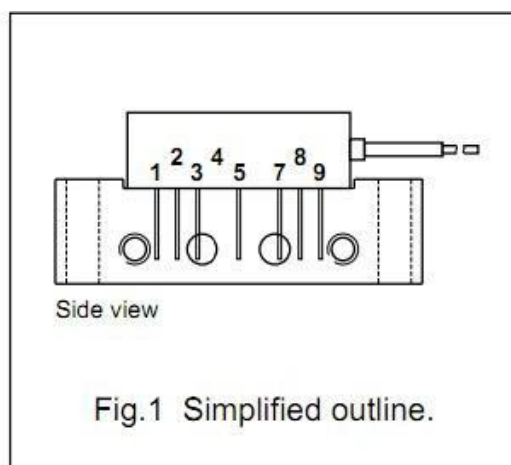
- ◆ Excellent linearity
- ◆ Excellent distortion performance
- ◆ Low input noise
- ◆ Standard CATV outline
- ◆ High output level

**PINNING - SOT115U**

PIN	DESCRIPTION
1	current monitor
2	common
3	common
5	+V <sub>B</sub> of the amplifier
7	common
8	common
9	output

**DESCRIPTION**

The supply voltage of KC833B0 is 24VDC .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 100dBuV/ch(@0dBm 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

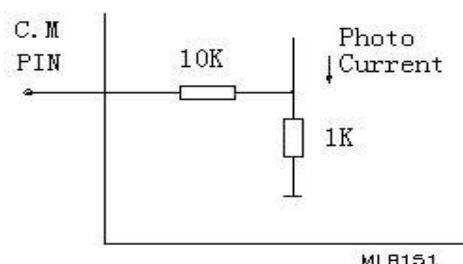
SYMBOL	PARAMETER	CONDITION	MIN	MAX	UNITS
<b>P<sub>in</sub></b>	Input Optical Power			3	mw
<b>T<sub>stg</sub></b>	Storage temperature		-40	+85	°C
<b>T<sub>op</sub></b>	Operating temperature		-20	+85	°C
<b>ESD</b>	ESD sensitivity	Human body model; R=1.5KΩ ;C=100pF	500		V

**CHARACTERISTICS**

T<sub>mb</sub>=25°C, V<sub>B</sub>=24VDC, Z<sub>s</sub>=Z<sub>L</sub>=75 Ω

SYMBOL	PARAMETER	UNIT	MIN.	TYP.	MAX.	CONDITIONS
f	Frequency range	MHz	40		860	
S <sub>λ</sub>	Spectral sensitivity	A/W	0.85			λ=1310±20nm
		A/W	0.9			λ=1550±20nm
λ	Optical wavelength	nm	1100		1650	-
V <sub>c.m</sub>	Voltage of C.M Pin	mV	850			λ=1310nm , 0dBm input
V <sub>o</sub>	Output voltage	dBμV		100		m=3.7%, f=860MHz, Optical power receiving at 0dBm
FL	Flatness of frequency response	dB	-	-	±0.75	f=40 to 860 MHz
CTB	Composite Triple Beat	dB	-	-70	-	60 channels flat, m=3.7%, measured at 543.25MHz; Optical power receiving at 0dBm
CSO	Composite Second Order distortion	dB	-	-64	-	
C/N	Carrier to Noise Ratio	dB	-	52	-	Optical power receiving at 0dBm
S <sub>22</sub>	Output Return losses	dB	-	-	-12	f=40 to 860 MHz
	Optical input return losses	dB	-	-	-45	
I <sub>tot</sub>	Total Current Consumption	mA	290	310	330	V <sub>B</sub> =24V

**PHOTODIODE CURRENT MONITOR PIN**

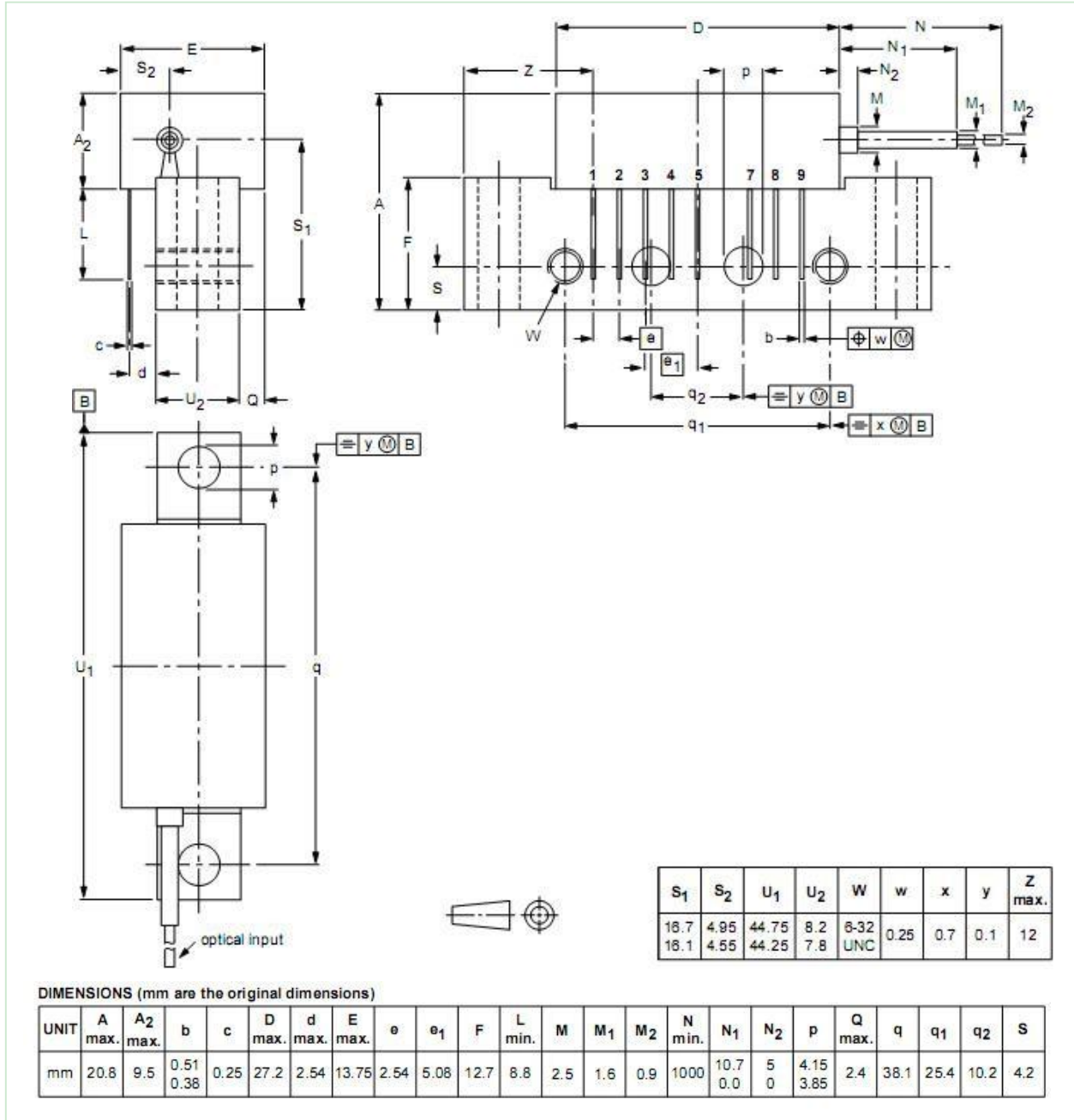


CURRENT MONITOR PIN

**PACKAGE OUTLINE**

Rectangular single-ended package; aluminium flange; 2 vertical mounting holes; 2 x 6-32 UNC and 2 extra horizontal mounting holes; optical input; 7 gold-plated in-line leads .

SOT115U



**UNIT: mm**