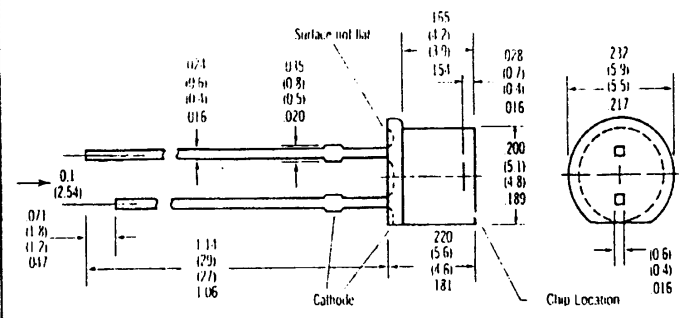


FIBRE OPTIC. 850nm PiN DIODE

TYPE: FDR 850 IR

FEATURES

- \* ULTRA- LOW COST
- \* HI REL EPOXY PACKAGE
- \* VERY FAST RESPONSE TIME
- \* HIGH RESPONSIVITY



**DESCRIPTION** This device provides users with outstanding performance and high reliability at extremely low cost. It is the most cost effective P.i.N diode to have been produced for 1st window fibre optic applications.

**MAXIMUM RECOMMENDED RATINGS** (TA = 25° C Unless otherwise noted)

Reverse Voltage .....	30 V
Continuous Forward Current .....	25 mA
Storage Temperature Range .....	-55 °C to +100 °C
Operating Temperature Range .....	-55 °C to +100 °C
Lead Solder Temperature .....	240 °C
(1.6mm from case for 5 seconds with soldering iron)	
Power Dissipation .....	100 mW

**OPTO/ELECTRICAL CHARACTERISTICS**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
RESPONSIVITY	R	—	0.62	—	A/W	@ 850 nM
DARK CURRENT	I <sub>d</sub>	—	1.0	10	nA	V <sub>R</sub> = 20 V (NOTE 2)
PEAK RESPONSE WAVELENGTH	λ <sub>p</sub>	—	850	—	nM	NOTE 1
CAPACITANCE	C <sub>t</sub>	—	3.8	—	pf	V <sub>R</sub> = 5 V (NOTE 2) f = 1 MHz
OUTPUT RISE TIME	t <sub>r</sub>	—	2	—	nS	R <sub>L</sub> = 50 Ω (NOTE 3) V <sub>R</sub> = 5 V
OUTPUT FALL TIME	t <sub>f</sub>	—	2	—	nS	R <sub>L</sub> = 50 Ω (NOTE 3) V <sub>R</sub> = 5 V
FREQUENCY CHARACTERISTICS	f <sub>c</sub>	—	500	—	MHz	Cutoff Frequency

NOTES: 1. Response range 10% to 10% is 375 - 1100 nM  
 2. Not Illuminated  
 3. Measured at 850 nM, I<sub>p</sub> = 14μA