





**American Opto Plus LED Corp.**  
**L513ED-TR**  
**5mm Red Diffused LED Lamp (Tape and Reel)**

**DIMENSIONS**

Item	Symbol	Millimeter		Inch	
		Size	Tolerance	Size	Tolerance
Tape Feed Hole Diameter	D	4.0	±0.2	0.157	±0.008
Component Lead Pitch	F	2.54	±0.5	0.1	±0.020
Front To Rear Deflection	ΔH	--	Max 2.0	--	Max 0.079
Height Of Seating Plane	H	--	±0.5	--	±0.020
Feed Hole To Bottom Of Component	H1	24.0	±0.5	0.945	±0.020
Feed Hole To Overall Component Height	H2	32.6	±0.5	1.283	±0.020
Feed Hole Pitch	P	12.7	±0.3	0.5	±0.012
Lead Location	P1	4.6	±0.7	0.181	±0.028
Center Of Component Location	P2	6.35	±1.3	0.25	±0.051
Overall Taped Package Thickness	T	--	Max 1.42	--	Max 0.056
Feed Hole Location	W0	9.0	±0.5	0.354	±0.020
Adhesive Tape Width	W1	13.0	±0.5	0.512	±0.020
Adhesive Tape Position	W2	--	Max 4.0	--	Max 0.157
Tape Width	W3	18.0	±0.5	0.709	±0.020
Bottom Of Component To Curve Of L/M	M	--	±0.5	--	±0.020



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### ABSOLUTE MAXIMUM RATINGS

Ta=25°C

Parameter	Symbol	Max	Unit
Power Dissipation	PD	84	mW
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Pulse Forward Current	IPF	100	mA
Operating Temperature Range	Topr	-40~+80	°C
Storage Temperature Range	Tstg	-40~+100	°C

Lead Soldering Temperature (1.6mm/0.063 inches from body) 260°C for 5 seconds.

### ELECTRO-OPTICAL CHARACTERISTICS

Ta=25°C

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=20mA	--	2.0	2.8	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Wavelength	λP	IF=20mA	--	635	--	nm
Viewing Angle	Δθ	IF=20mA	--	45	--	deg
Luminous Intensity	Iv	IF=10mA	15	30	--	mcd