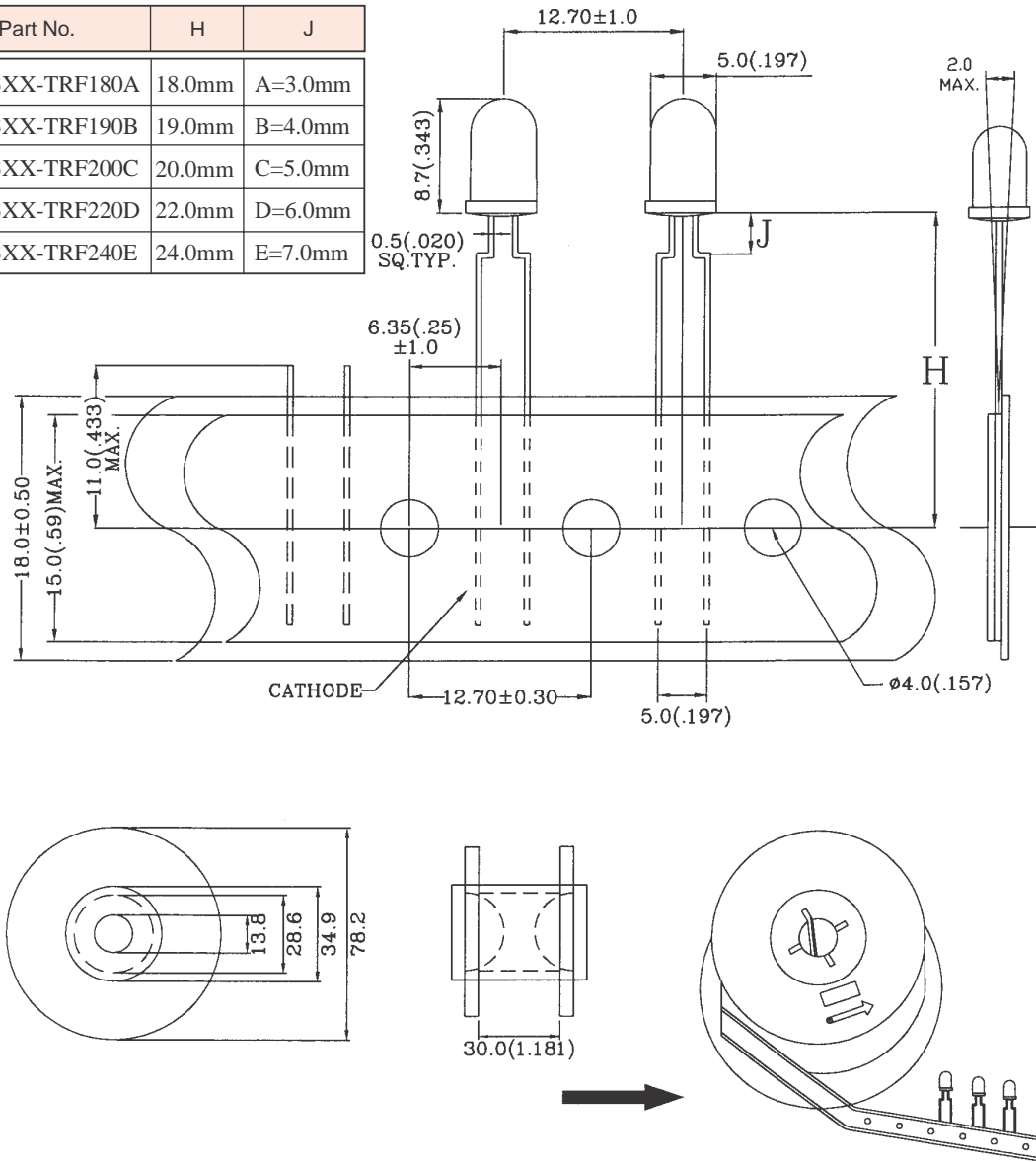


Part No.	H	J
L-513XX-TRF180A	18.0mm	A=3.0mm
L-513XX-TRF190B	19.0mm	B=4.0mm
L-513XX-TRF200C	20.0mm	C=5.0mm
L-513XX-TRF220D	22.0mm	D=6.0mm
L-513XX-TRF240E	24.0mm	E=7.0mm



Loaded quantity per reel : 1000 pcs/reel

Part No.	Chip		Lens Color	Wave Length λ p(nm)	Electro-Optical Characteristics			View Angle (deg)
	Raw Material	Emitted Color			Vf(V)20mA		Iv(mcd)20mA	
					Typ.	Max.	Typ.	
L-513HD-TRFHJ	GaP	Red	Red Diffused	700	2.3	2.8	8.0	60
L-513GD-TRFHJ	GaP	Green	Green Diffused	565	2.2	2.8	20.0	60
L-513YD-TRFHJ	GaAsP/GaP	Yellow	Yellow Diffused	585	2.1	2.8	15.0	60
L-513ED-TRFHJ	GaAsP/GaP	Hi.effi Red	Red Diffused	635	2.1	2.8	30.0	60
L-513SRD-TRFHJ	GaAlAs	Super Red	Red Diffused	660	1.8	2.2	45.0	60

1.All dimension are in millimeters (inches).

2.Tolerance is ± 0.25 mm (0.01") unless otherwise specified.