



Tapered Amplifiers

Tapered amplifier (TA) diodes have a flared geometry to maintain a single transverse mode but boost the power to the Watt level. They are typically operated in a master oscillator power amplifier (MOPA) configuration. Both facets are coated with a high-quality AR coating.

WL is the gain maximum of the amplifier. WLmin and WLmax specify the typical width of the gain spectrum. P is the maximum power.

TOPTICA offers both single TA chips and customized tapered amplifier systems. The diodes are mounted on an optimized carrier which provides access to both facets and removes the heat efficiently.

WL nm	WLmin nm	WLmax nm	P mW	PO#	Stock	Remark
650	645	655	250	#TA-0650-0250-5	> 3	150mW <649nm/>652nm; Sys. only
650	645	655	250	#TA-0650-0250-7	1	150mW <649nm/>652nm; Sys. only
670	658	673	500	#TA-0670-0500-6	*	250mW <663 >671nm
675	665	678	500	#TA-0675-0500-1	1	250mW <669 >676nm
690	675	695	400	#TA-0690-0500-1	> 3	250mW <680,>690nm
735	725	736	500	#TA-0735-0500-4	> 3	
765	758	778	1500	#TA-0765-1500-4	*	M2<2; 1.2W for lambda < 762nm
780	762	792	1000	#TA-0780-1000-8	*	750 mW <775nm
780	770	795	2000	#TA-0780-2000-5	1	1.5W <777 >788; 1W <773 >790
795	792	805	500	#TA-0795-0500-4	1	
808	795	820	2000	#TA-0808-2000-1	*	1.5W<800; 1W >815;
830	820	837	500	#TA-0830-0500-4	> 3	
840	830	845	500	#TA-0840-0500-4	1	
850	825	860	750	#TA-0850-0750-4	2	
850	835	865	1000	#TA-0850-1000-5	*	500mW outside 845-858
850	835	865	1000	#TA-0850-1000-6	*	500mW outside 845-858
850	845	865	1500	#TA-0850-1500-1	*	
870	865	880	1500	#TA-0870-1500-1	> 3	
890	875	900	1500	#TA-0890-1500-1	> 3	1000 mW < 880
915	870	920	500	#TA-0915-0500-4	1	
915	900	930	1500	#TA-0915-1500-1	> 3	1000mW <910nm
915	875	920	1500	#TA-0915-1500-4	> 3	M2<2 @ 1.5W, 1W outside 880-915
950	940	960	1500	#TA-0950-1500-1	1	
970	950	985	1500	#TA-0970-1500-1	> 3	1000mW outside 965-980
970	965	985	3000	#TA-0970-3000-1	*	2000mW outside 970-980
980	957	994	1000	#TA-0980-1000-4	> 3	
1010	1000	1025	1500	#TA-1010-1500-1	> 3	
1060	1035	1085	1000	#TA-1060-1000-5	> 3	
1070	1060	1083	2000	#TA-1070-2000-4	1	
1135	1120	1145	500	#TA-1135-0500-1	*	
1170	1155	1190	750	#TA-1170-0750-1	1	0.5W <1160,>1185, up to 1W 1180

* : upon request