

NARROWBAND

SP6T SWITCH

SERIES TN-6/TN-6-HA

HIGH ISOLATION-REFLECTIVE AND ABSORPTIVE 0.02-18 GHz

ELECTRICAL PERFORMANCE

Power: 1 watt average, 10 watts peak, survival

STANDARD SWITCH										HIGH SPEED OPTION			
Isolation: 60 dB or 80 dB minimum Speed: 2 microsec. maximum										MODEL-1		MODEL-2	
Reflective Model No.	Absorptive Model No.	Frequency Range GHz	Isolation Min. dB	Insertion Loss		VSWR† Max.	OUTLINE		Speed Nanosec.	Insertion Loss Max. dB Ref. / Abs.	Speed Nanosec.	Insertion Loss Max. dB Ref. / Abs.	
				Ref. / Abs.	Max. dB		Config. Square Ref. / Abs.	Config. Round Ref. / Abs.					
TN-610	TN-610-HA	0.02-0.07	60	0.75 / 0.85	1.45	2 / 5	4 / 4	500	0.80 / 0.90	N/A	N/A		
TN-611	TN-611-HA	0.02-0.07	80	0.80 / 0.90	1.45	2 / 5	4 / 4	500	0.85 / 0.95	N/A	N/A		
TN-612	TN-613-HA	0.2-0.25	60	0.85 / 0.95	1.45	2 / 5	4 / 4	500	0.90 / 1.00	N/A	N/A		
TN-614	TN-615-HA	0.2-0.25	80	0.90 / 1.00	1.45	2 / 5	4 / 4	500	0.95 / 1.05	N/A	N/A		
TN-615	TN-616-HA	0.4-0.45	60	0.85 / 0.95	1.45	2 / 5	4 / 4	200	0.90 / 1.00	N/A	N/A		
TN-616	TN-618-HA	0.4-0.45	80	0.90 / 1.00	1.45	2 / 5	4 / 4	200	0.95 / 1.05	N/A	N/A		
TN-618	TN-619-HA	0.7-0.8	60	0.95 / 1.05	1.45	2 / 2	3 / 4	100	1.00 / 1.10	20	1.05 / 1.15		
TN-619	TN-621-HA	0.7-0.8	80	1.00 / 1.10	1.45	2 / 2	3 / 4	100	1.05 / 1.15	20	1.10 / 1.20		
TN-621	TN-622-HA	0.95-1.22	60	1.05 / 1.15	1.45	1 / 2	3 / 4	100	1.10 / 1.20	20	1.15 / 1.25		
TN-622	TN-624-HA	0.95-1.22	80	1.10 / 1.20	1.45	1 / 2	3 / 4	100	1.15 / 1.25	20	1.20 / 1.30		
TN-623	TN-625-HA	1.02-1.10	60	1.05 / 1.15	1.45	1 / 2	3 / 4	100	1.10 / 1.20	20	1.15 / 1.25		
TN-625	TN-627-HA	1.02-1.10	80	1.10 / 1.20	1.45	1 / 2	3 / 4	100	1.15 / 1.25	20	1.20 / 1.30		
TN-626	TN-628-HA	1.2-1.4	60	1.05 / 1.15	1.45	1 / 2	3 / 4	100	1.10 / 1.20	20	1.15 / 1.25		
TN-627	TN-630-HA	1.2-1.4	80	1.10 / 1.20	1.45	1 / 2	3 / 4	100	1.15 / 1.25	20	1.20 / 1.30		
TN-629	TN-631-HA	1.5-1.6	60	1.10 / 1.20	1.45	1 / 2	3 / 4	100	1.15 / 1.25	20	1.20 / 1.30		
TN-631	TN-633-HA	1.5-1.6	80	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-632	TN-634-HA	1.7-2.4	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-633	TN-636-HA	1.7-2.4	80	1.25 / 1.35	1.45	1 / 2	3 / 4	100	1.30 / 1.40	20	1.40 / 1.50		
TN-635	TN-637-HA	2.2-2.3	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-636	TN-639-HA	2.2-2.3	80	1.25 / 1.35	1.45	1 / 2	3 / 4	100	1.30 / 1.40	20	1.40 / 1.50		
TN-637	TN-640-HA	2.9-3.1	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-639	TN-642-HA	2.9-3.1	80	1.25 / 1.35	1.45	1 / 2	3 / 6	100	1.30 / 1.40	20	1.40 / 1.50		
TN-641	TN-643-HA	3.1-3.5	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-642	TN-644-HA	3.1-3.5	80	1.25 / 1.35	1.45	1 / 2	3 / 6	100	1.30 / 1.40	20	1.40 / 1.50		
TN-643	TN-646-HA	3.3-3.7	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-645	TN-648-HA	3.3-3.7	80	1.25 / 1.35	1.45	1 / 2	3 / 6	100	1.30 / 1.40	20	1.40 / 1.50		
TN-646	TN-649-HA	3.7-4.2	60	1.20 / 1.30	1.45	1 / 2	3 / 4	100	1.25 / 1.35	20	1.30 / 1.40		
TN-647	TN-651-HA	3.7-4.2	80	1.25 / 1.35	1.45	1 / 2	3 / 6	100	1.30 / 1.40	20	1.40 / 1.50		
TN-649	TN-652-HA	4.2-4.4	60	1.30 / 1.40	1.45	1 / 2	3 / 4	100	1.40 / 1.50	20	1.50 / 1.60		
TN-651	TN-654-HA	4.2-4.4	80	1.40 / 1.50	1.45	1 / 2	3 / 6	100	1.50 / 1.60	20	1.60 / 1.70		
TN-652	TN-655-HA	4.4-5.0	60	1.40 / 1.50	1.55	1 / 2	3 / 4	100	1.50 / 1.60	20	1.60 / 1.70		
TN-653	TN-657-HA	4.4-5.0	80	1.45 / 1.55	1.55	1 / 2	3 / 6	100	1.55 / 1.65	20	1.70 / 1.80		
TN-655	TN-658-HA	5.0-5.25	60	1.45 / 1.55	1.55	1 / 2	3 / 4	100	1.55 / 1.65	20	1.70 / 1.80		
TN-656	TN-660-HA	5.0-5.25	80	1.50 / 1.60	1.55	1 / 2	3 / 6	100	1.60 / 1.70	20	1.70 / 1.80		
TN-657	TN-661-HA	5.4-5.9	60	1.50 / 1.60	1.55	1 / 2	3 / 4	100	1.60 / 1.70	20	1.70 / 1.80		
TN-659	TN-663-HA	5.4-5.9	80	1.60 / 1.70	1.55	1 / 2	3 / 6	100	1.70 / 1.80	20	1.80 / 1.90		
TN-661	TN-664-HA	5.9-6.4	60	1.60 / 1.70	1.55	1 / 2	3 / 4	100	1.70 / 1.80	20	1.80 / 1.90		
TN-662	TN-666-HA	5.9-6.4	80	1.70 / 1.80	1.55	1 / 2	3 / 6	100	1.80 / 1.90	20	1.90 / 2.00		
TN-663	TN-667-HA	6.7-7.4	60	1.65 / 1.75	1.55	1 / 2	3 / 4	100	1.80 / 1.90	20	1.90 / 2.00		
TN-665	TN-669-HA	6.7-7.4	80	1.75 / 1.85	1.55	1 / 2	3 / 6	100	1.90 / 2.00	20	2.00 / 2.10		
TN-666	TN-670-HA	7.1-7.7	60	1.70 / 1.80	1.55	1 / 2	3 / 4	100	1.80 / 1.90	20	2.00 / 2.10		
TN-667	TN-672-HA	7.1-7.7	80	1.80 / 1.90	1.55	1 / 2	3 / 6	100	1.90 / 2.00	20	2.10 / 2.20		
TN-669	TN-673-HA	8.5-9.6	60	1.80 / 1.90	1.55	1 / 1	3 / 4	100	1.90 / 2.00	20	2.00 / 2.10		
TN-671	TN-675-HA	8.5-9.6	80	1.90 / 2.00	1.55	1 / 1	3 / 6	100	2.00 / 2.10	20	2.10 / 2.20		
TN-672	TN-676-HA	9.0-9.2	60	1.80 / 1.90	1.55	1 / 1	3 / 4	100	1.90 / 2.00	20	2.00 / 2.10		
TN-673	TN-678-HA	9.0-9.2	80	1.90 / 2.00	1.55	1 / 1	3 / 6	100	2.00 / 2.10	20	2.10 / 2.20		
TN-675	TN-679-HA	9.3-9.7	60	1.80 / 1.90	1.55	1 / 1	3 / 4	100	1.90 / 2.00	20	2.00 / 2.10		
TN-676	TN-681-HA	9.3-9.7	80	1.90 / 2.00	1.55	1 / 1	3 / 6	100	2.00 / 2.10	20	2.10 / 2.20		
TN-677	TN-682-HA	9.8-10.4	60	1.80 / 1.90	1.55	1 / 1	3 / 4	100	1.90 / 2.00	20*	2.00 / 2.10		
TN-679	TN-684-HA	9.8-10.4	80	1.90 / 2.00	1.55	1 / 1	3 / 6	100	2.00 / 2.10	20	2.10 / 2.20		
TN-681	TN-685-HA	10.0-10.5	60	1.85 / 1.95	1.55	1 / 1	3 / 4	100	2.00 / 2.10	20	2.10 / 2.20		
TN-682	TN-687-HA	10.0-10.5	80	1.95 / 2.05	1.55	1 / 1	3 / 6	100	2.10 / 2.20	20	2.20 / 2.30		
TN-683	TN-688-HA	12.0-12.4	60	1.90 / 2.00	1.55	1 / 1	3 / 4	100	2.00 / 2.10	20	2.10 / 2.20		
TN-685	TN-689-HA	12.0-12.4	80	2.00 / 2.10	1.55	1 / 1	3 / 6	100	2.10 / 2.20	20	2.20 / 2.30		
TN-686	TN-690-HA	13.1-13.5	60	2.00 / 2.10	1.65	1 / 1	3 / 4	100	2.10 / 2.20	20	2.20 / 2.30		
TN-687	TN-692-HA	13.1-13.5	80	2.10 / 2.20	1.65	1 / 1	3 / 6	100	2.20 / 2.30	20	2.30 / 2.40		
TN-689	TN-693-HA	14.5-15.5	60	2.00 / 2.10	1.65	1 / 1	3 / 4	100	2.10 / 2.20	20	2.20 / 2.30		
TN-691	TN-695-HA	14.5-15.5	80	2.10 / 2.20	1.65	1 / 1	3 / 6	100	2.20 / 2.30	20	2.30 / 2.40		
TN-693	TN-696-HA	15.0-17.0	60	1.90 / 2.00	1.65	1 / 1	3 / 4	100	2.00 / 2.10	20	2.10 / 2.20		
TN-695	TN-697-HA	15.0-17.0	80	2.10 / 2.20	1.65	1 / 1	3 / 6	100	2.20 / 2.30	20	2.30 / 2.40		
TN-696	TN-698-HA	16.0-18.0	60	2.10 / 2.20	1.65	1 / 1	3 / 4	100	2.20 / 2.30	20	2.30 / 2.40		
TN-698	TN-699-HA	16.0-18.0	80	2.30 / 2.40	1.65	1 / 1	3 / 6	100	2.40 / 2.50	20	2.60 / 2.70		

If improvement of any of the electrical specifications listed above is required, consult factory.

† Reflective Switch: VSWR measured in the 'ON' input and 'ON' Output Position.
Absorptive Switch: VSWR measured in the 'ON' Input and 'ON' Output and 'OFF' Output Position.

Insertion Loss measured with input power less than 100 mW. Increase insertion loss by 20% for outer arms, for rectangular (S) package.