

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type	Breakdown Voltage @ It (Note 1)		Working Peak Reverse Voltage	Maximum Reverse Leakage @ VRWM	Maximum Reverse Leakage @ VRWM, Tj=150°C	Maximum Peak Pulse Surge Current	Maximum Clamping Voltage @ IPPM
	VBR (V)		VRWM	IR	ID	IPPM ⁽²⁾	VRSM
	Min.	Max.	(mA)	(V)	(μA)	(A)	(V)
TPSMC6.8	6.12	7.48	10	5.50	1000	10000	10.8
TPSMC6.8A	6.45	7.14	10	5.80	1000	10000	10.5
TPSMC7.5	6.75	8.25	10	6.05	500	5000	11.7
TPSMC7.5A	7.13	7.88	10	6.40	500	2000	11.3
TPSMC8.2	7.38	9.02	10	6.63	200	2000	12.5
TPSMC8.2A	7.79	8.61	10	7.02	200	500	12.1
TPSMC9.1	8.19	10.0	1.0	7.37	50	500	13.8
TPSMC9.1A	8.65	9.55	1.0	7.78	50	200	13.4
TPSMC10	9.00	11.0	1.0	8.10	20	200	15.0
TPSMC10A	9.50	10.5	1.0	8.55	20	50	14.5
TPSMC11	9.90	12.1	1.0	8.92	5.0	50	16.2
TPSMC11A	10.5	11.6	1.0	9.40	5.0	10	15.6
TPSMC12	10.8	13.2	1.0	9.72	2.0	10	17.3
TPSMC12A	11.4	12.6	1.0	10.2	2.0	10	16.7
TPSMC13	11.7	14.3	1.0	10.5	2.0	10	19.0
TPSMC13A	12.4	13.7	1.0	11.1	2.0	10	18.2
TPSMC15	13.5	16.5	1.0	12.1	1.0	10	22.0
TPSMC15A	14.3	15.8	1.0	12.8	1.0	10	21.2
TPSMC16	14.4	17.6	1.0	12.9	1.0	10	23.5
TPSMC16A	15.2	16.8	1.0	13.6	1.0	10	22.5
TPSMC18	16.2	19.8	1.0	14.5	1.0	10	26.5
TPSMC18A	17.1	18.9	1.0	15.3	1.0	10	25.2
TPSMC20	18.0	22.0	1.0	16.2	1.0	10	29.1
TPSMC20A	19.0	21.0	1.0	17.1	1.0	10	27.7
TPSMC22	19.8	24.2	1.0	17.8	1.0	10	31.9
TPSMC22A	20.9	23.1	1.0	18.8	1.0	10	30.6
TPSMC24	21.6	26.4	1.0	19.4	1.0	10	34.7
TPSMC24A	22.8	25.2	1.0	20.5	1.0	10	33.2
TPSMC27	24.3	29.7	1.0	21.8	1.0	10	39.1
TPSMC27A	25.7	28.4	1.0	23.1	1.0	10	37.5
TPSMC30	27.0	33.0	1.0	24.3	1.0	10	43.5
TPSMC30A	28.5	31.5	1.0	25.6	1.0	10	41.4
TPSMC33	29.7	36.3	1.0	26.8	1.0	10	47.7
TPSMC33A	31.4	34.7	1.0	28.2	1.0	10	45.7
TPSMC36	32.4	39.6	1.0	29.1	1.0	10	52.0
TPSMC36A	34.2	37.8	1.0	30.8	1.0	10	49.9
TPSMC39	35.1	42.9	1.0	31.6	1.0	10	56.4
TPSMC39A	37.1	41.0	1.0	33.3	1.0	10	53.9
TPSMC43	38.7	47.3	1.0	34.8	1.0	10	61.9
TPSMC43A	40.9	45.2	1.0	36.8	1.0	10	59.3

Notes :

- (1) VBR measured after It applied for 300 μs., It = square wave pulse or equivalent.
- (2) Surge current waveform per Fig. 5 and derate per Fig. 1
- (3) "PSMC" will be omitted in marking on the diode.

RATING AND CHARACTERISTIC CURVES (TPSMC6.8 - TPSMC43A)

FIG.1 - PULSE DERATING CURVE

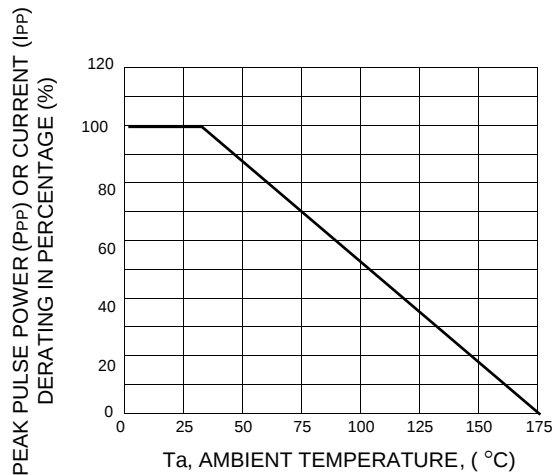


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

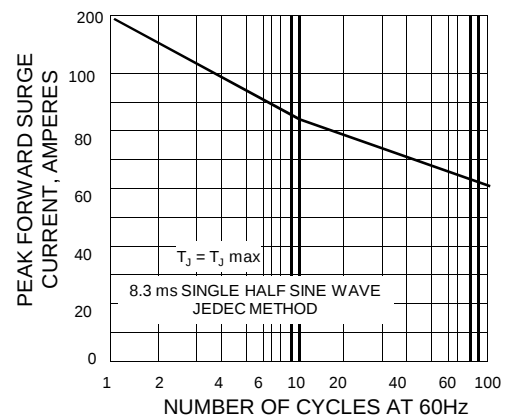


FIG.3 - TYPICAL JUNCTION CAPACITANCE

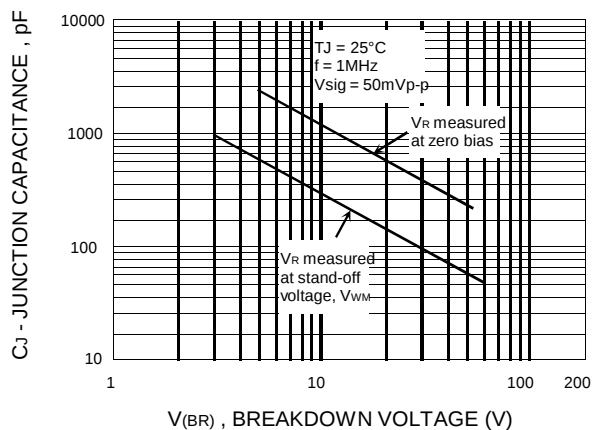


FIG.4 - PULSE RATING CURVE

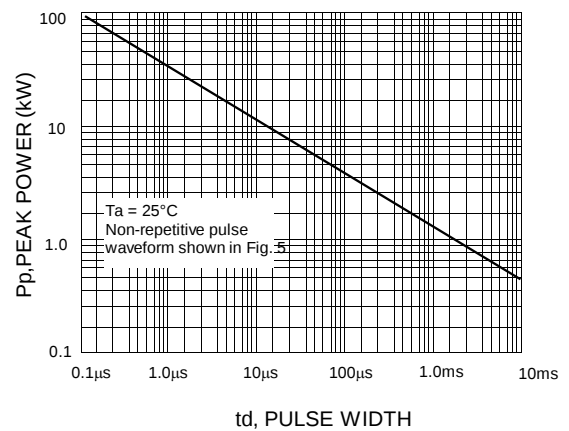


FIG.5 - PULSE WAVEFORM

