



TAYCHIPST

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

SAC5.0 THRU SAC50

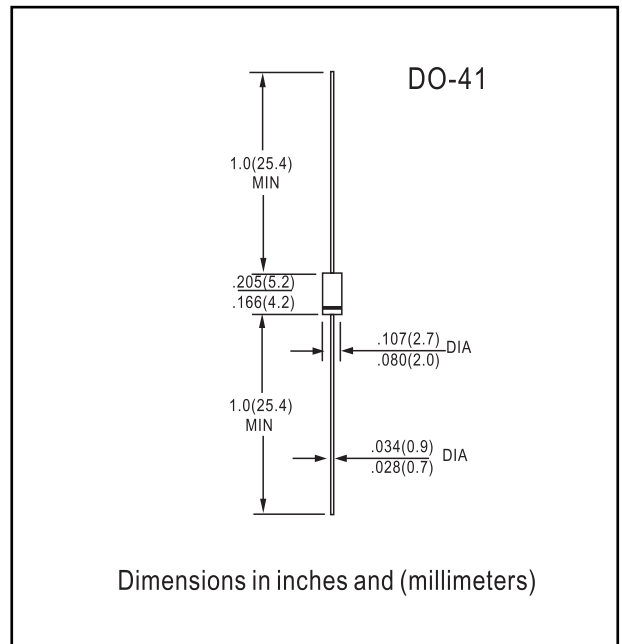
5.0V-50V 500W

FEATURES

- * 500W Peak Pulse Surge reverse capability on 10/1000µs waveform
- * Excellent clamping capability
- * Low incremental surge resistance
- * Fast response time : typically less than 1.0 ns from 0 volts to BV

Mechanical Data

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
Peak Pulse Power Dissipation on 10/1000µs waveform (Note 1, Figure 1)	PPPM	Minimum 500	Watts
Steady State Power Dissipation at TL = 75 °C Lead Lengths 0.375", (9.5mm)	Pd	1.0	Watts
Peak Forward Surge Current on 10/1000 µs Waveform (Fig. 3, Note 1)	IFSM	See Table 1.	Amps.
Operating and Storage Temperature Range	TJ, TSTG	- 65 to + 175	°C

Note :

(1) Non-repetitive Current pulse, per Fig. 5 and derated above Ta = 25 °C per Fig. 2



ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

TYPE NUMBER	Breakdown Voltage @ I_t		Reverse Stand-off Voltage	Maximum Reverse Leakage @ V_{RWM}	Maximum Clamping Voltage @ $I_{RSM}=5A$	Maximum Reverse Current	Maximum Junction Capacitance @ 0 Volt	Working Inverse Blocking Voltage	Max. Inverse Blocking Current @ V_{WIB}	Peak Inverse Blocking Voltage
	V_{BR} (V)	I_t								
	Min.	(mA)	V_{RWM} (V)	I_R (μA)	V_{RSM} (V)	I_{RSM} (A)	pF	V_{WIB} (V)	I_{IB} (mA)	V_{PIB} (V)
SAC5.0	7.6	1.0	5.0	300	10.0	44	50	75	1.0	100
SAC6.0	7.9	1.0	6.0	300	11.2	41	50	75	1.0	100
SAC7.0	8.3	1.0	7.0	300	12.6	38	50	75	1.0	100
SAC8.0	8.9	1.0	8.0	100	13.4	36	50	75	1.0	100
SAC8.5	9.4	1.0	8.5	50	14.0	34	50	75	1.0	100
SAC10	11.1	1.0	10	5.0	16.3	29	50	75	1.0	100
SAC12	13.3	1.0	12	5.0	19.0	25	50	75	1.0	100
SAC15	16.7	1.0	15	5.0	23.6	20	50	75	1.0	100
SAC18	20.0	1.0	18	5.0	28.8	15	50	75	1.0	100
SAC22	24.4	1.0	22	5.0	35.4	14	50	75	1.0	100
SAC26	28.9	1.0	26	5.0	42.3	11.1	50	75	1.0	100
SAC30	33.3	1.0	30	5.0	48.6	10	50	75	1.0	100
SAC36	40.0	1.0	36	5.0	60.0	8.6	50	75	1.0	100
SAC45	50.0	1.0	45	5.0	77.0	6.8	50	150	1.0	200
SAC50	55.5	1.0	50	5.0	88.0	5.8	50	150	1.0	200

FIG.1 - PEAK PULSE POWER RATING CURVE

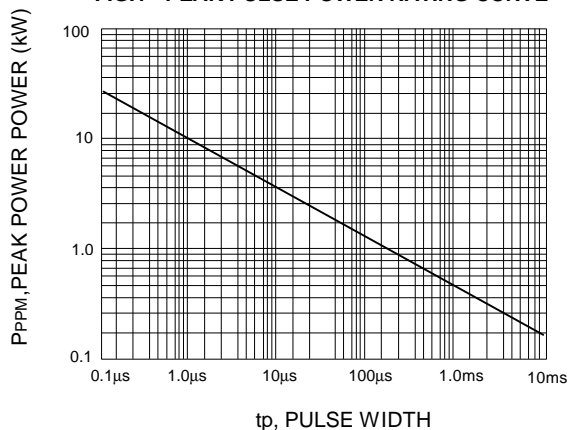


FIG.2 - PULSE DERATING CURVE

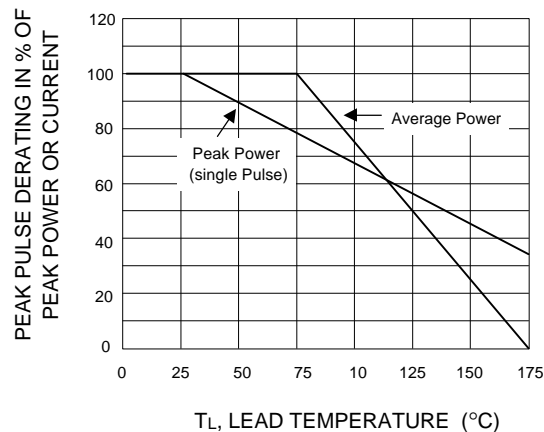


FIG.3 - PULSE WAVEFORM

