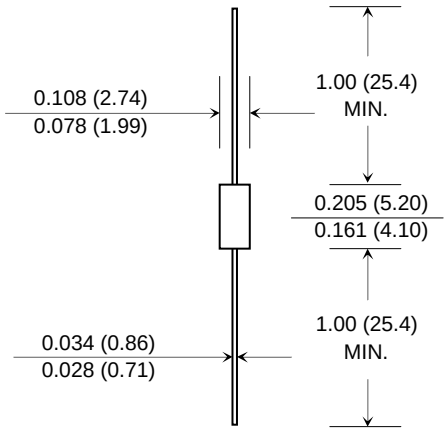
SAC8.0-SIR

LOW CAPACITANCE TRANSIENT VOLTAGE SUPPRESSOR

V_{BR} : 8.0 Volts

P_{PK} : 500 Watts

DO - 41



Dimensions in inches and (millimeters)

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
* Pb / RoHS Free

MECHANICAL DATA

* Case : DO-41 Molded plastic
* Epoxy : UL94V-0 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

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)	P_{PPM}	Minimum 500	W
Steady State Power Dissipation at T_L = 75 °C Lead Lengths 0.375", (9.5mm)	P_D	1.0	W
Peak Forward Surge Current on 10/1000 μs Waveform (Fig. 3, Note 1)	I_{FSM}	See Table 1.	A
Operating and Storage Temperature Range	T_J, T_{STG}	- 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	Breakdown Voltage @ It		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)	It	V_{RWM}	I_R	V_{RSM}	I_{RSM}		V_{WIB}	I_{IB}	V_{PIB}
	Min.	(mA)	(V)	(μA)	(V)	(A)	pF	(V)	mA	(V)
SAC8.0-SIR	8.9	1.0	8.0	25	13.4	36	50	75	1.0	100

FIG.1 - PEAK PULSE POWER RATING CURVE

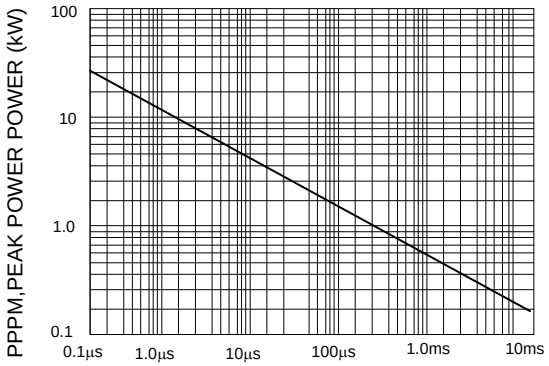


FIG.2 - PULSE DERATING CURVE

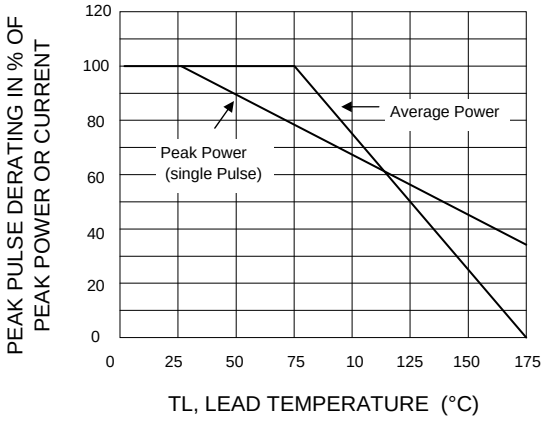


FIG.3 - PULSE WAVEFORM