

VOLTAGE RANGE: 5.0 - 220V
POWER: 200Watts

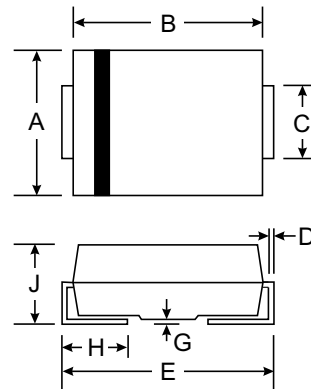


Features

- For surface mounted applications
- Low profile package
- Low incremental surge resistance, excellent clamping capability
- 200W peak pulse power capability with a 10/1000 μ s wave from, repetition rate (duty cycle): 0.01%
- High temperature soldering guaranteed:
260 / 10 seconds, at terminals

Mechanical Data

- Case : SMA (DO-214AC) Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Lead formed for Surface mount
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		



Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Maximum P_{PK} Dissipation (PW - 10/1000 μ s)	P_{PK}	200	W
Maximum P_{PK} Dissipation @ $T_a = 25^\circ\text{C}$ (PW - 8/10 μ s) (Note 2)	P_{PK}	1000	W
DC Power Dissipation @ $T_a = 25^\circ\text{C}$ (Note 3)	P_D	385	mW
Derate above 25°C		4.0	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient (Note 3)	$R_{\theta JA}$	325	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Lead (Note 3)	$R_{\theta JL}$	26	$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Notes :

- (1) Non-repetitive current pulse at $T_a = 25^\circ\text{C}$, per waveform of Fig. 2.
- (2) Non-repetitive current pulse at $T_a = 25^\circ\text{C}$, per waveform of Fig. 5.
- (3) Mounted with recommended minimum pad size, DC board FR4.

Electrical Characteristics(T =25 °C unless otherwise noted)

TYPE		Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Reverse Leakage @V _{RWM}	Reverse Stand-Off Voltage	Peak Pulse Current	Maximum Clamping Voltage @I _{PP}
(Uni)	(Bi)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	I _R (uA)	V _{RWM} (V)	I _{PP} (A)	V _C (V)
P2SMA5.0A	P2SMA5.0CA	6.40	7.00	10	400	5.0	21.74	9.2
P2SMA6.0A	P2SMA6.0CA	6.67	7.37	10	400	6.0	19.42	10.3
P2SMA6.5A	P2SMA6.5CA	7.22	7.98	10	250	6.5	17.86	11.2
P2SMA7.0A	P2SMA7.0CA	7.78	8.60	10	100	7.0	16.67	12.0
P2SMA7.5A	P2SMA7.5CA	8.33	9.21	1	50	7.5	15.50	12.9
P2SMA8.0A	P2SMA8.0CA	8.89	9.83	1	25	8.0	14.71	13.6
P2SMA8.5A	P2SMA8.5CA	9.44	10.40	1	10	8.5	13.89	14.4
P2SMA9.0A	P2SMA9.0CA	10.00	11.10	1	5	9.0	12.99	15.4
P2SMA10A	P2SMA10CA	11.10	12.30	1	2.5	10.0	11.76	17.0
P2SMA11A	P2SMA11CA	12.20	13.50	1	2.5	11.0	10.99	18.2
P2SMA12A	P2SMA12CA	13.30	14.70	1	2.5	12.0	10.05	19.9
P2SMA13A	P2SMA13CA	14.40	15.90	1	1	13.0	9.30	21.5
P2SMA14A	P2SMA14CA	15.60	17.20	1	1	14.0	8.62	23.2
P2SMA15A	P2SMA15CA	16.70	18.50	1	1	15.0	8.20	24.4
P2SMA16A	P2SMA16CA	17.80	19.70	1	1	16.0	7.69	26.0
P2SMA17A	P2SMA17CA	18.90	20.90	1	1	17.0	7.25	27.6
P2SMA18A	P2SMA18CA	20.00	22.10	1	1	18.0	6.85	29.2
P2SMA19A	P2SMA19CA	21.10	23.30	1	1	19.0	6.54	30.6
P2SMA20A	P2SMA20CA	22.20	24.50	1	1	20.0	6.17	32.4
P2SMA22A	P2SMA22CA	24.40	26.90	1	1	22.0	5.63	35.5
P2SMA24A	P2SMA24CA	26.70	29.50	1	1	24.0	5.14	38.9
P2SMA26A	P2SMA26CA	28.90	31.90	1	1	26.0	4.75	42.1
P2SMA28A	P2SMA28CA	31.10	34.40	1	1	28.0	4.41	45.4
P2SMA30A	P2SMA30CA	33.30	36.80	1	1	30.0	4.13	48.4
P2SMA33A	P2SMA33CA	36.70	40.60	1	1	33.0	3.75	53.3
P2SMA36A	P2SMA36CA	40.00	44.20	1	1	36.0	3.44	58.1
P2SMA40A	P2SMA40CA	44.40	49.10	1	1	40.0	3.10	64.5
P2SMA43A	P2SMA43CA	47.80	52.80	1	1	43.0	2.88	69.4
P2SMA45A	P2SMA45CA	50.00	55.30	1	1	45.0	2.75	72.7
P2SMA48A	P2SMA48CA	53.30	58.90	1	1	48.0	2.58	77.4
P2SMA51A	P2SMA51CA	56.70	62.70	1	1	51.0	2.43	82.4
P2SMA54A	P2SMA54CA	60.00	66.30	1	1	54.0	2.30	87.1
P2SMA58A	P2SMA58CA	64.40	71.20	1	1	58.0	2.14	93.6
P2SMA60A	P2SMA60CA	66.70	73.70	1	1	60.0	2.07	96.8
P2SMA64A	P2SMA64CA	71.10	78.60	1	1	64.0	1.94	103.0

Note:

1. The available parts are "A" type only, the parts without A(V_{BR} is ±10%) is not available
2. Add suffix 'C' or 'CA' after part number to specify Bi-directional devices
3. For Bi-Directional devices having V_R of 10 volts and under, the I_R limit is double



TYPE		Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Reverse Leakage @V _{RWM}	Reverse Stand-Off Voltage	Peak Pulse Current	Maximum Clamping Voltage @I _{PP}
(Uni)	(Bi)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	I _R (uA)	V _{RWM} (V)	I _{PP} (A)	V _C (V)
P2SMA70A	P2SMA70CA	77.80	86.00	1	1	70.0	1.77	113.0
P2SMA75A	P2SMA75CA	83.30	92.10	1	1	75.0	1.65	121.0
P2SMA78A	P2SMA78CA	86.70	95.80	1	1	78.0	1.59	126.0
P2SMA80A	P2SMA80CA	88.80	97.60	1	1	80.0	1.55	129.0
P2SMA85A	P2SMA85CA	94.40	104.00	1	1	85.0	1.46	137.0
P2SMA90A	P2SMA90CA	100.00	111.00	1	1	90.0	1.37	146.0
P2SMA100A	P2SMA100CA	111.00	123.00	1	1	100.0	1.23	162.0
P2SMA110A	P2SMA110CA	122.00	135.00	1	1	110.0	1.13	177.0
P2SMA120A	P2SMA120CA	133.00	147.00	1	1	120.0	1.04	193.0
P2SMA130A	P2SMA130CA	144.00	159.00	1	1	130.0	0.96	209.0
P2SMA140A	P2SMA140CA	155.00	171.00	1	1	140.0	0.89	224.0
P2SMA150A	P2SMA150CA	167.00	185.00	1	1	150.0	0.82	243.0
P2SMA160A	P2SMA160CA	178.00	197.00	1	1	160.0	0.77	259.0
P2SMA170A	P2SMA170CA	189.00	209.00	1	1	170.0	0.73	275.0
P2SMA180A	P2SMA180CA	200.00	220.00	1	1	180.0	0.68	292.0
P2SMA190A	P2SMA190CA	211.00	232.00	1	1	190.0	0.65	308.0
P2SMA200A	P2SMA200CA	224.00	247.00	1	1	200.0	0.62	324.0
P2SMA220A	P2SMA220CA	246.00	272.00	1	1	220.0	0.56	356.0

RATING AND CHARACTERISTIC CURVES (P2SMA5.0A(CA) - P2SMA220A(CA))

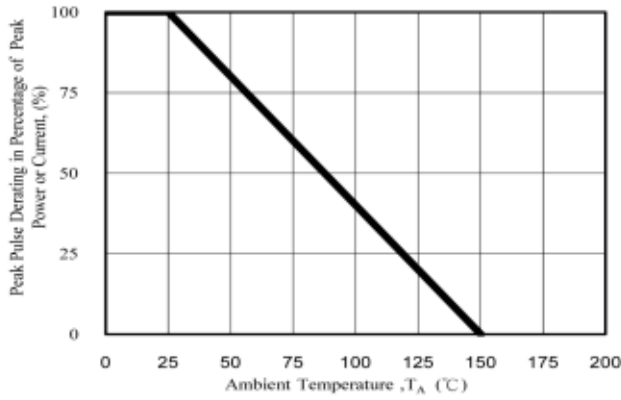


Fig. 1 - Pulse Derating Curve

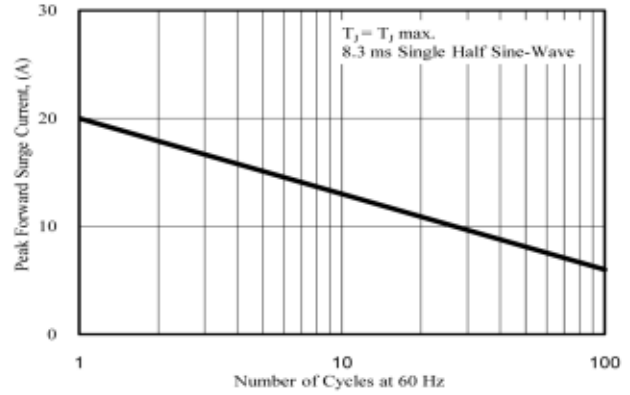


Fig. 2 - Maximum Non-Repetitive Surge Current

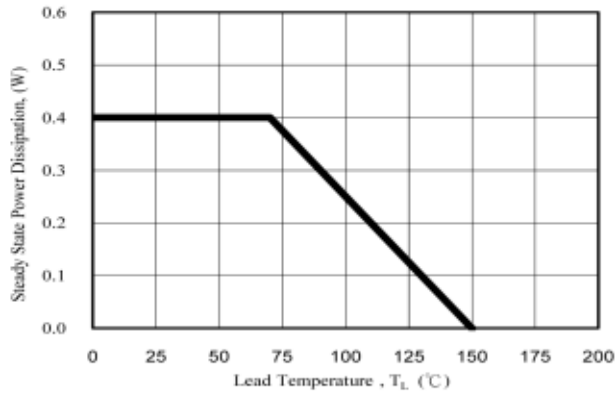


Fig. 3 - Steady State Power Derating Curve

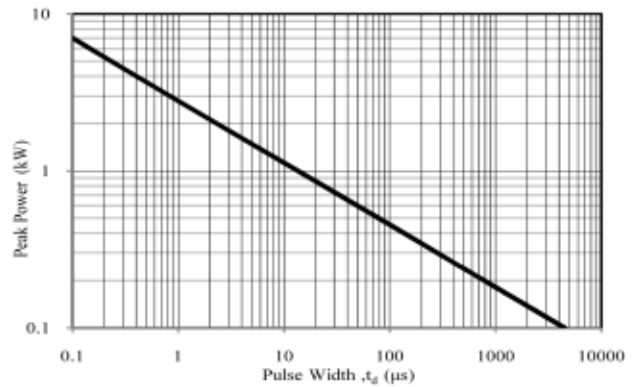


Fig. 4 - Peak Pulse Power Rating Curve

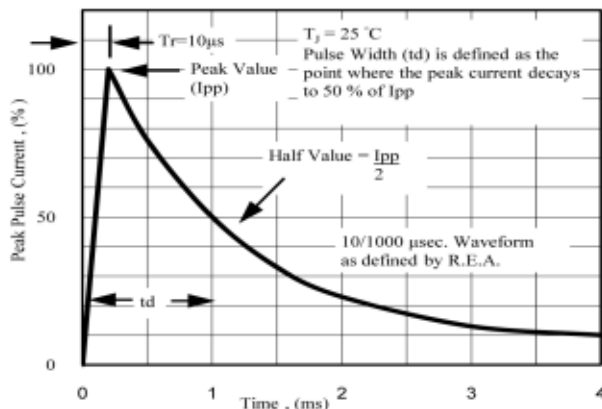


Fig. 5 - Pulse Waveform

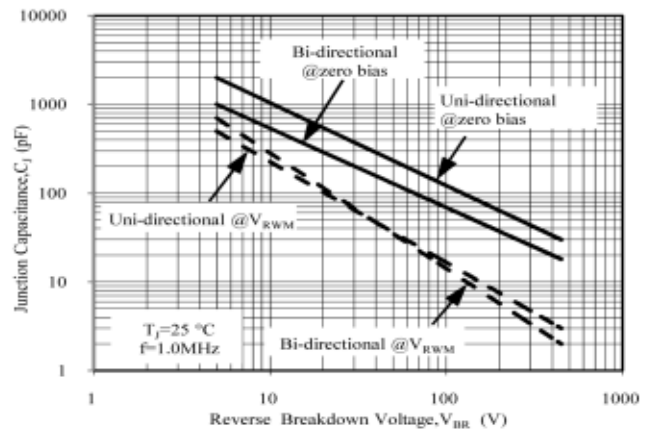


Fig. 6 - Typical Junction Capacitance