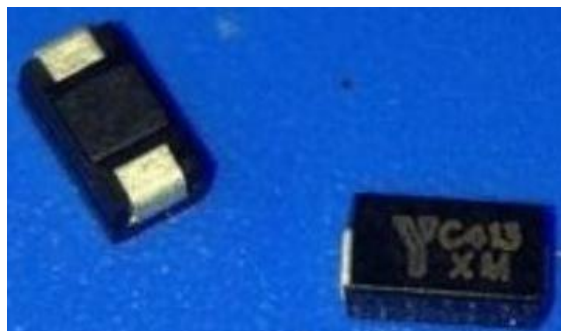


SMA6J-H Series

Features

- Glass passivated chip
- 600 W peak pulse power capability with a 10/1000 μ s waveform, repetitive rate (duty cycle):0.01 %
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- Very fast response time
- AEC-Q101 qualified
- RoHS compliant



Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method2026
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

SMA(DO-214AC)

Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak power dissipation with a 10/1000 μ s waveform ⁽¹⁾	P _{PP}	600	Watts
Peak pulse current with a 10/1000 μ s waveform ⁽¹⁾	I _{pp}	See Next Table	A
Power dissipation on infinite heatsink at TL = 75 °C	P _D	3	W
Peak forward surge current, 8.3ms single half sinewave unidirectional only ⁽²⁾	I _{FSM}	60	A
Maximum instantaneous forward voltage at 25 A for unidirectional only ⁽³⁾	V _F	3.5	V
Operating junction and storage temperature range	T _J T _{STG}	-55 to +150	°C

Note:

(1)Non-repetitive current pulse per Fig.5 and derated above TA= 25 °C per Fig.1

(2)Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

(3)V_F<3.5V for devices of V_{BR}<200V and V_F<5.0V for devices of V_{BR}>201V

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

Part Number (Bi)	Part Number (Uni)	MARKING		Reverse Stand off Voltage V _R (Volts)	Breakdown Voltage V _{BR} (Volts)@I _T		Test Current I _T (mA)	Maximum Reverse Leakage I _R @ V _R (μA)	Maximum Peak Pulse Current I _{pp} (A)	Maximum Clamping Voltage V _C @ I _{pp} (V)
		BI	UNI		Min .V	Max .V				
SMA6J5.0A-H		6WEH		5.0	6.40	7.00	10	800	65.2	9.2
SMA6J6.0A-H	SMA6J6.0CA-H	6WGH	6AGH	6.0	6.67	7.37	10	800	58.3	10.3
SMA6J6.5A-H	SMA6J6.5CA-H	6WKH	6AKH	6.5	7.22	7.90	10	500	53.6	11.2
SMA6J7.0A-H	SMA6J7.0CA-H	6WMH	6AMH	7.0	7.78	8.60	10	200	50.0	12.0
SMA6J7.5A-H	SMA6J7.5CA-H	6WPH	6APH	7.5	8.33	9.21	1	100	46.5	12.9
SMA6J8.0A-H	SMA6J8.0CA-H	6WRH	6ARH	8.0	8.89	9.83	1	50	44.1	13.6
SMA6J8.5A-H	SMA6J8.5CA-H	6WTH	6ATH	8.5	9.44	10.40	1	10	41.7	14.4
SMA6J9.0A-H	SMA6J9.0CA-H	6WVH	6AVH	9.0	10.00	11.10	1	5.0	39.0	15.4
SMA6J10A-H	SMA6J10CA-H	6WXH	6AXH	10.0	11.10	12.30	1	1.0	35.3	17.0
SMA6J11A-H	SMA6J11CA-H	6WZH	6AZH	11.0	12.20	13.50	1	1.0	33.0	18.2
SMA6J12A-H	SMA6J12CA-H	6XEH	6BEH	12.0	13.30	14.70	1	1.0	30.2	19.9
SMA6J13A-H	SMA6J13CA-H	6XGH	6BGH	13.0	14.40	15.90	1	1.0	27.9	21.5
SMA6J14A-H	SMA6J14CA-H	6XKH	6BKH	14.0	15.60	17.20	1	1.0	25.9	23.2
SMA6J15A-H	SMA6J15CA-H	6XMH	6BMH	15.0	16.70	18.50	1	1.0	24.6	24.4
SMA6J16A-H	SMA6J16CA-H	6XPH	6BPH	16.0	17.80	19.70	1	1.0	23.1	26.0
SMA6J17A-H	SMA6J17CA-H	6XRH	6BRH	17.0	18.90	20.90	1	1.0	21.7	27.6
SMA6J18A-H	SMA6J18CA-H	6XTH	6BTH	18.0	20.00	22.10	1	1.0	20.5	29.2
SMA6J20A-H	SMA6J20CA-H	6XVH	6BVH	20.0	22.20	24.50	1	1.0	18.5	32.4
SMA6J22A-H	SMA6J22CA-H	6XXH	6BXH	22.0	24.40	26.90	1	1.0	16.9	35.5
SMA6J24A-H	SMA6J24CA-H	6XZH	6BZH	24.0	26.70	29.50	1	1.0	15.4	38.9
SMA6J26A-H	SMA6J26CA-H	6YEH	6CEH	26.0	28.90	31.90	1	1.0	14.3	42.1
SMA6J28A-H	SMA6J28CA-H	6YGH	6CGH	28.0	31.10	34.40	1	1.0	13.2	45.4
SMA6J30A-H	SMA6J30CA-H	6YKH	6CKH	30.0	33.30	36.80	1	1.0	12.4	48.4
SMA6J33A-H	SMA6J33CA-H	6YMH	6CMH	33.0	36.70	40.60	1	1.0	11.3	53.3
SMA6J36A-H	SMA6J36CA-H	6YPH	6CPH	36.0	40.00	44.20	1	1.0	10.3	58.1
SMA6J40A-H	SMA6J40CA-H	6YRH	6CRH	40.0	44.40	49.10	1	1.0	9.30	64.5
1SMA6J43A-H	SMA6J43CA-H	6YTH	6CTH	43.0	47.80	52.80	1	1.0	8.65	69.4
SMA6J45A-H	SMA6J45CA-H	6YVH	6CVH	45.0	50.00	55.30	1	1.0	8.25	72.7
SMA6J48A-H	SMA6J48CA-H	6YXH	6CXH	48.0	53.30	58.90	1	1.0	7.75	77.4
SMA6J51A-H	SMA6J51CA-H	6YZH	6CZH	51.0	56.70	62.70	1	1.0	7.28	82.4
SMA6J54A-H	SMA6J54CA-H	6ZEH	6REH	54.0	60.00	66.30	1	1.0	6.89	87.1
SMA6J58A-H	SMA6J58CA-H	6ZGH	6RGH	58.0	64.40	71.20	1	1.0	6.41	93.6

Rating & Characteristic Curves

Figure 1- Pulse Derating Curve

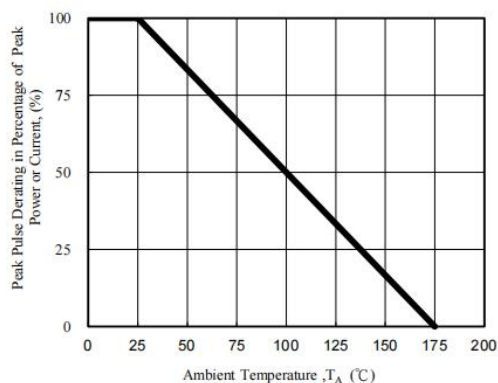


Figure 2- Maximum Non-Repetitive Surge Current

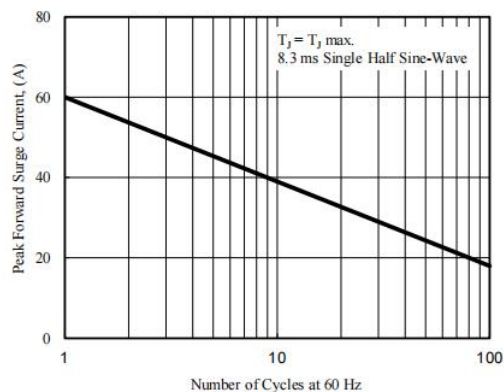


Figure 3- Steady State Power Derating Curve

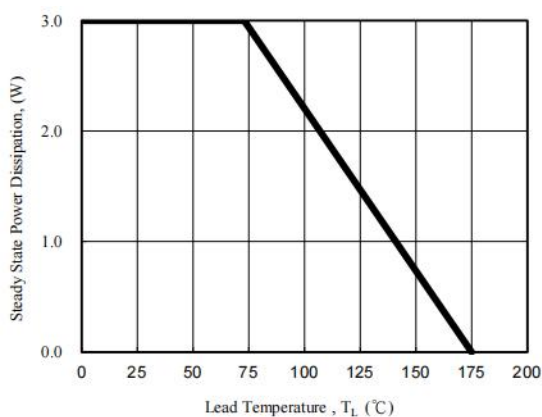


Figure 4- Peak Pulse Power Rating Curve

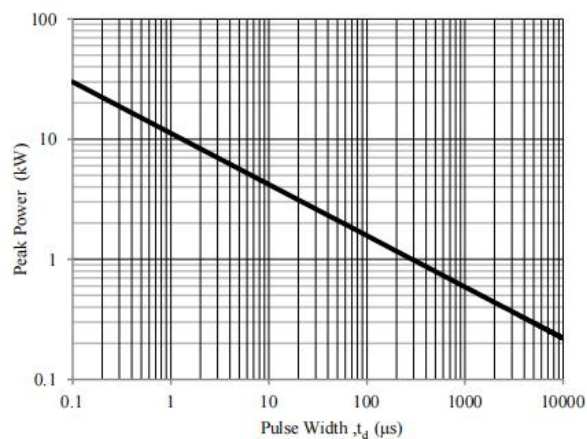


Figure 5- Pulse Waveform

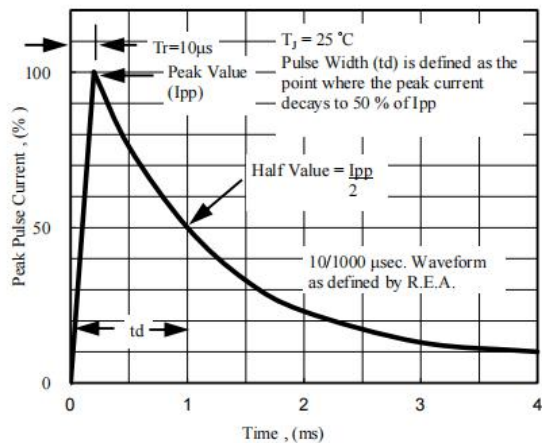
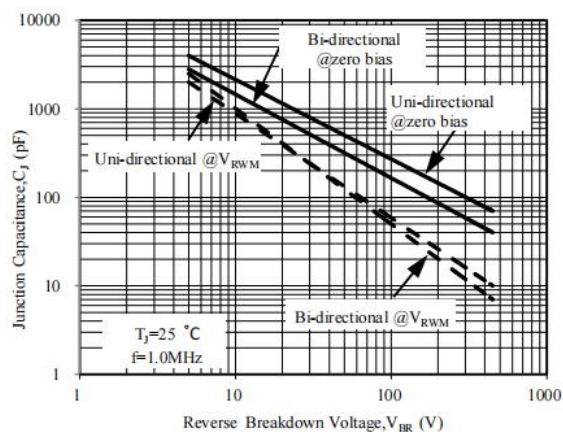
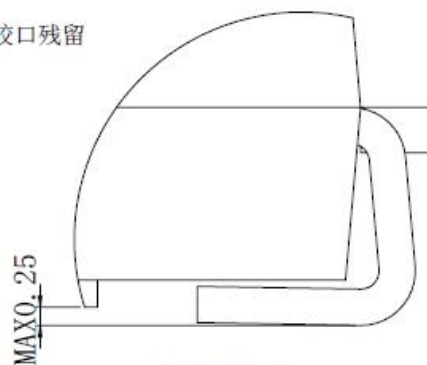
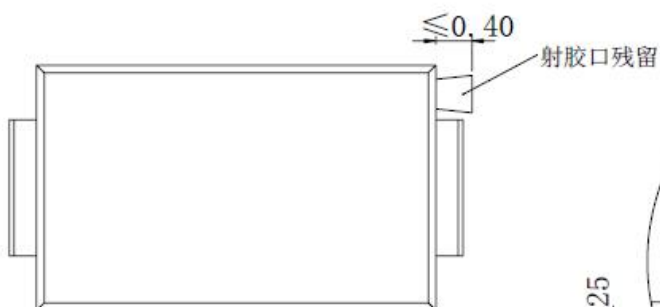
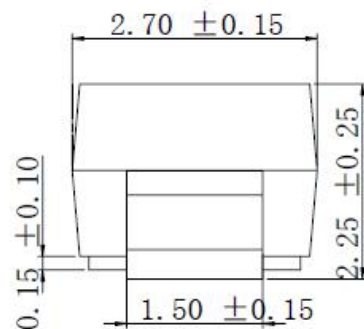
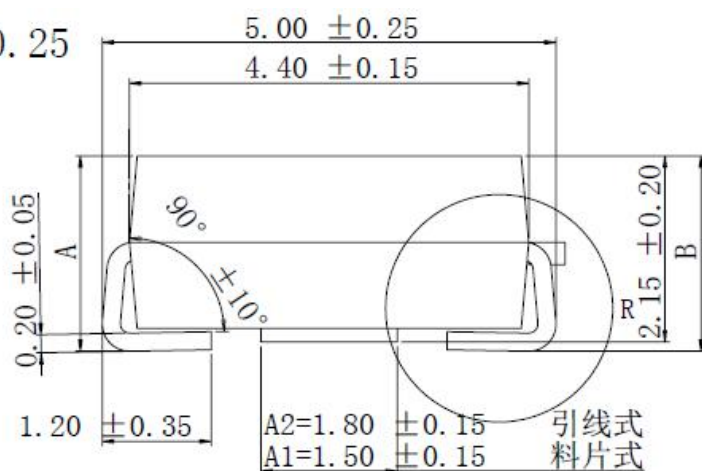


Figure 6- Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS in millimeters

$$|A-B| \leq 0.25$$



局部视图 R
比例 40 : 1

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.