

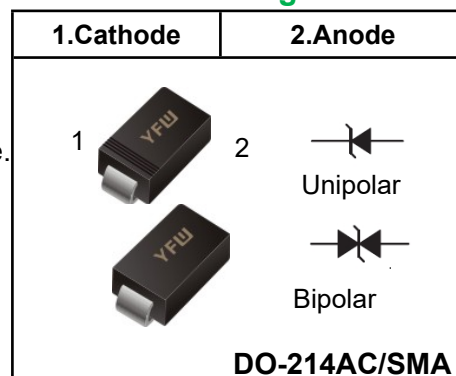
Surface mount transient voltage suppressor power 400 watts

Stand-Off Voltage: 6.8V

FEATURES

- ◆For surface mounted applications in order to optimize board space.
- ◆Low profile package.
- ◆Glass passivated junction.
- ◆Low inductance.
- ◆Plastic package has Underwriters Laboratory Flammability.

Pinning



MECHANICAL DATA

- ◆Case: DO-214AC/SMA
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.07g / 0.002oz

Maximum Ratings and Electrical characteristics

Ratings at 25 ambient temperature unless o °C therwise specified.

Parameter		Symbol	Value	Unit
Peak Pulse Power Dissipation on TA=25°C (Note 1,2,5, Fig1)		P_{PPM}	400	W
Peak Forward Surge Current (Note3, Note4)		I_{FSM} (UNI)	60	A
Peak Pulse Current on 10/1000 us waveform (Note 1) Fig 3		I_{PPM}	see Table 1	A
ESD Voltage per IEC6100-4-2	Contact	V_{ESD1}	±30	kV
	Air	V_{ESD2}	±30	
Typical Junction Capacitance at VR=4V, f=1MHz		C_j	390	pF
Typical Thermal Resistance Junction to Ambient(Note 2)		R_{θJA}	120	°C/W
Operating Junction Temperature and Storage Temperature Range		T_J, T_{STG}	-55 to +150	°C

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig. 2.
2. Mounted on 5mm² copper pads to each terminal.
3. Peak Forward Surge Current : 8.3ms single half sine-wave Superimposed on rated load (JEDEC method).
4. Peak pulse power waveform is 10/1000μS.

Characteristics at Ta = 25°C

Table 1

Type		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current	Package	
			V _{BR} @ I _T						SMA	
		V _{RWM}	Min	Max	I _T	I _R @ V _{RWM}	V _C @ I _{PP}	I _{PP}	Device Marking Ccode	
UNI	BI	V	V	V	mA	μA	V	A	UNI	BI
SMAJ6V8A	SMAJ6V8CA	5.8	6.45	7.14	10	1000	10.5	39	6V8A	6V8C

Fig.1 Peak Pulse Power Rating Curve

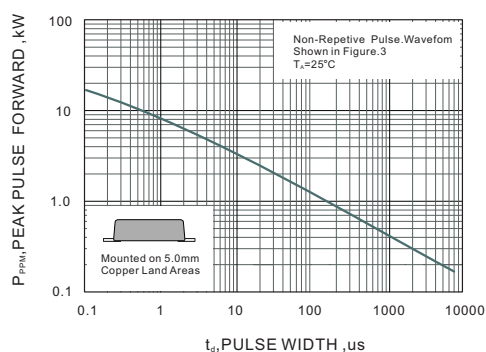


Fig.2 Forward Current Derating Curve

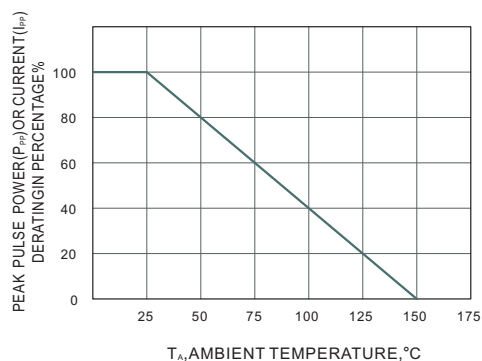


Fig.3 Pulse Waveform

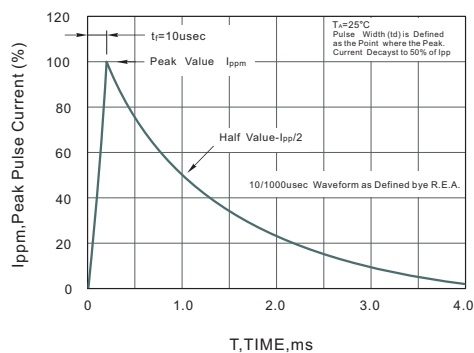
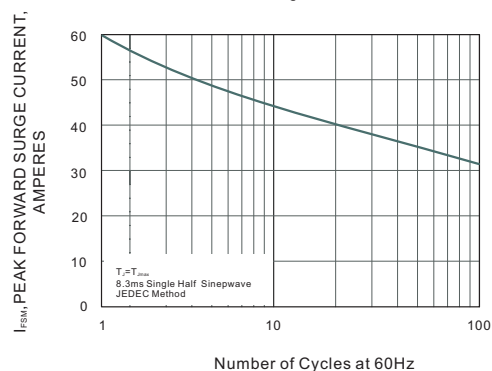


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

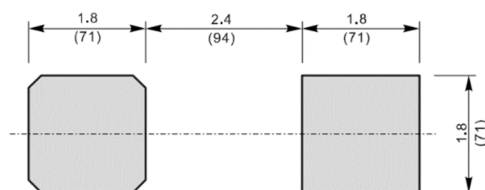
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

DO-214AC SMA

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H _E	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{\text{(mil)}}$

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.