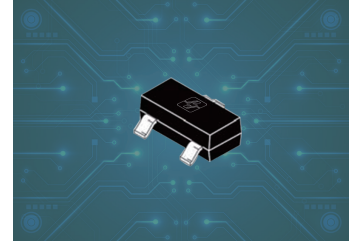


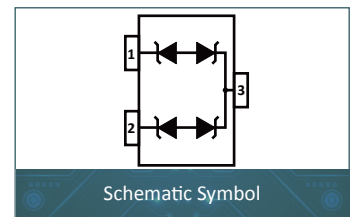
1. FEATURES

- 400W Peak Pulse Power per Line (tp=8/20μs)
- Protects two +12V to -7V lines
- Low clamping voltage
- RoHS Compliant
- Moisture sensitivity level: Level 1
- Weight 8 Milligrams (Approximate)



2. APPLICATIONS

- Protection of RS-485 transceivers with extended common-mode range
- Security systems
- Automatic Teller Machines
- HFC systems
- Networks



3. IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 17A (8/20μs)

4. THERMAL CONSIDERATIONS

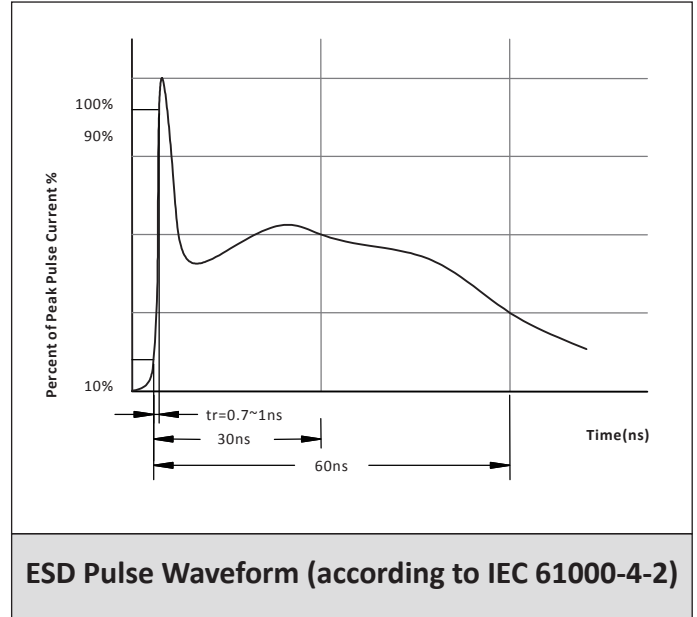
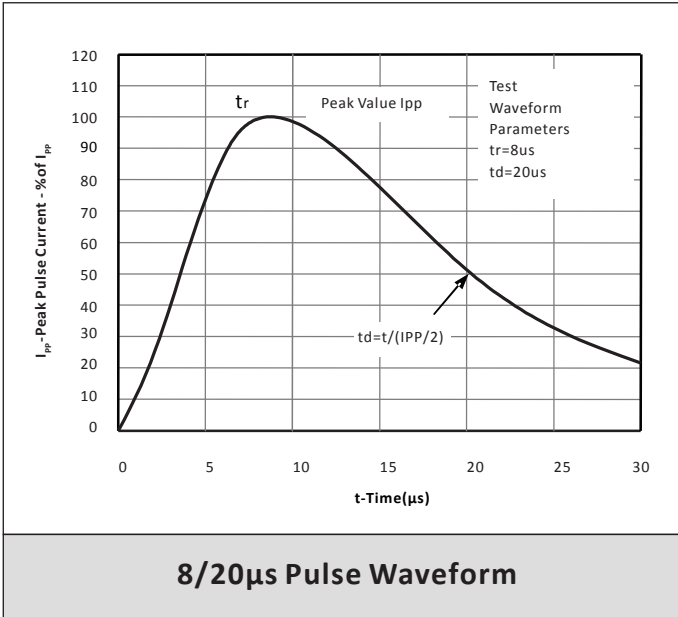
Symbol	Parameter	Value	Unit
P _{pp}	Peak Pulse Power (tp=8/20μs waveform)	400	Watts
T _j	Operating Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C
T _L	Lead Soldering Temperature	260(10 sec.)	°C

5. ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	V _{RWM}	V _{BR}	I _T	V _{c@5A}	V _c		I _R	C _T
		Max.(V)	Min.(V)	(mA)	Max.(V)	Max.(V)	@A	Max.(uA)	Max.(pF)
Pin 3-1 & Pin 3-2	712	7.0	7.5	1.0	10.0	12.0	17.0	10.0	55.0
Pin 1-3 & Pin 2-3	712	12.0	13.3	1.0	20.0	26.0	17.0	1.0	55.0

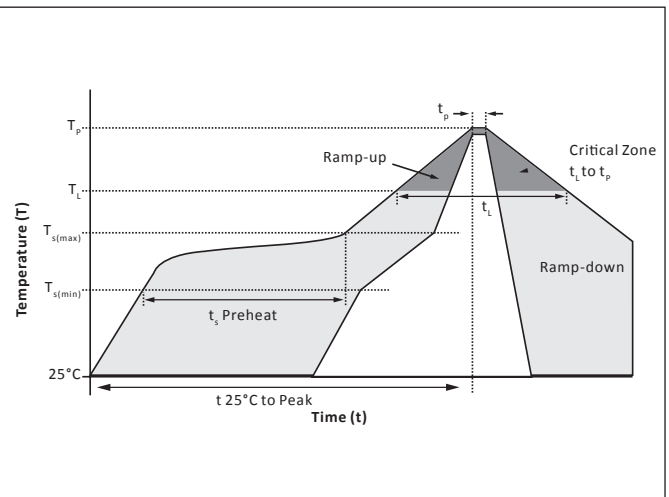


6. CHARACTERISTIC CURVES



7. SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_r)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C



8. SOT-23 PACKAGE INFORMATION

DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.04	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.89	1.11	0.035	0.044
D	0.37	0.50	0.015	0.020
G	1.78	2.04	0.070	0.081
H	0.013	0.100	0.001	0.004
J	0.085	0.180	0.003	0.007
K	0.35	0.69	0.014	0.029
L	0.89	1.02	0.035	0.040
S	2.10	2.64	0.083	0.104
V	0.45	0.60	0.018	0.024

9. RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.71	0.97	0.028	0.038
B	1.88	2.13	0.074	0.084
C	0.71	0.97	0.028	0.038
D	0.81	1.07	0.032	0.042

10. ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SESM712	SOT-23	3000PCS	7"



CONTACT US

Headquarters

No.3387 Shendu Road Pujiang I&E Park Minhang Shanghai China

Hotline

400-021-5756

Web

[Http://www.semiware.com](http://www.semiware.com)

By Telephone

General:86-21-3463-7172

Sales:86-21-3463-7345

Technical Support:86-21-3463-7654

By Fax

General:86-21-3965-0654

Sales:86-21-3463-7458

By Email

General:china@semiware.com

Sales:sales@semiware.com

Technical Support:fae@semiware.com

By QR Code



Website



Wechat

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