

#### **DESCRIPTION**

The SE10F15B5.0A is Bi-directional transientvoltage suppressor (TVS) to protect sensitive electronic components from electrostatic discharge(ESD). It is particularly well-suited for cellular phones, PMP, MID, PDA, digital cameras and other electronic equipments.

The SE10F15B5.0A is safely dissipating ESD strikesto meet the ESD immunity testing of IEC61000-4-2 level 4. The SE10F15B5.0A is available in a DFN1006 package with Pb-free.

#### **FEATURES**

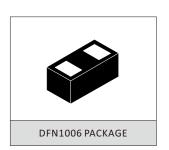
- > 174 Watts Peak Pulse Power per Line (tp=8/20µs)
- > Protects one bidirectional I/O line
- > Working voltages: 5.0V
- > Low leakage current

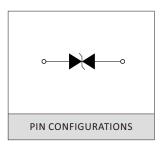
## **APPLICATIONS**

- > Cell Phone Handsets and Accessories
- > Microprocessor based equipment
- > Personal Digital Assistants (PDA's)
- > Notebooks, Desktops, and Servers
- > Portable Instrumentation
- > Peripherals
- > Pagers

#### **IEC COMPATIBILITY**

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





# MAXIMUM RATINGS AND CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform).	Рррм	174	Watts
Operating Temperature Range.	Tı	-55~+125	°C
Storage Temperature Range.	Тѕтс	-55~+150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

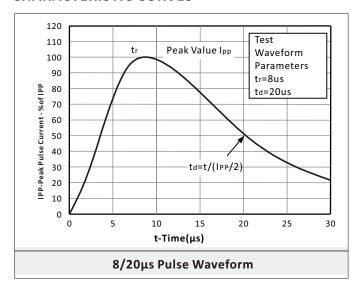
## **ELECTRICAL CHARACTERISTICS**

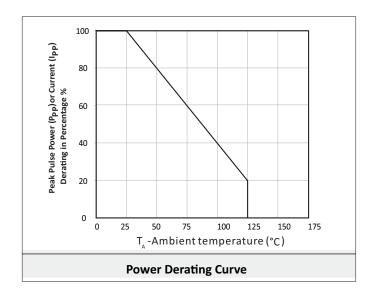
Part Number	Device Marking Code	Reverse Stand-off Voltage Max.	Breakdown Voltage Min.	Test Current	Peak Pulse Current Typ.@5A	Pea Puls Curre	se	Junction Capacitance Typ.	Reverse Leakage Max.
		Vrwm(V)	VBR (V)	Iτ(mA)	Vc(V)	Vc(' Max.	V) @A	CT(PF)	Ir(µA)
SE10F15B5.0A	С	5.00	5.6	1	11.6	18.6	9.4	15	0.5





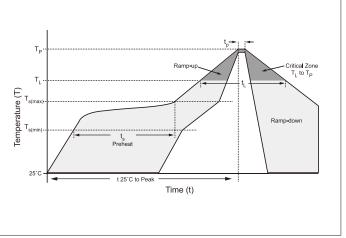
# **CHARACTERISTIC CURVES**





# **REFLOW PROFILE**

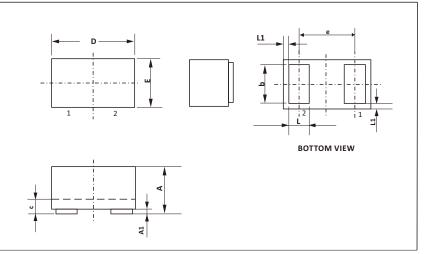
	Reflow Condition	Lead-free assembly	
Pre Heat	Temperature Min (Ts(min))	150°C	
	Temperature Max (Ts(max)	200°C	
	Time (min to max) (ts)	60 – 180 secs	
Average ra	mp up rate (Liquidus Temp (TL) to peak	3°C/second max	
	Ts(max)to TL - Ramp-up Rate	3°C/second max	
Reflow	Temperature (TL) (Liquidus)	217°C	
	Time (min to max) (tL)	60 – 150 seconds	
Peak Tem	perature (TP)	260°C	
Time with	in 5°C of actual peak Temperature (tp)	20 – 40 seconds	
Ramp-dov	vn Rate	6°C/second max	
Time 25°C	to peak Temperature (TP)	8 minutes Max.	
Do not ex	ceed	260°C	





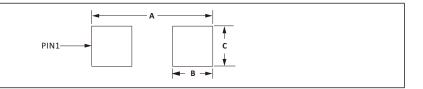
# **DFN1006 PACKAGE DIMENSIONS**

OUTLINEDIMENSIONS					
DIM	MILLIMETERS		INCHES		
DIN	MIN	MAX	MIN	MAX	
Α	0. 40	0.55	0.016	0.022	
A1	0	0.05	0	0.002	
b	0.40	0.60	0.016	0.024	
С	0.12	0.18	0.005	0.007	
D	0.95	1.05	0.037	0.041	
е	0.65	STYP	0.026	STYP	
Е	0.55	0.65	0.022	0.026	
L	0.15	0.35	0.006	0.014	
L1	0.0	5REF	0.00	2REF	



# RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	MILLIMETERS	INCHES
А	1.20	0.047
В	0. 47	0.019
С	0. 60	0.024



# **ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
SE10F15B5.0A	DFN1006	10000PCS	7"





# **CONTACT US**

## Headquarters

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

#### Hotline

400-021-5756

# Web

Http://www.semiware.com.cn

### By Telephone

General: 86-21-3463-7172 Sales: 86-21-3463-7345

Technical Support: 86-21-34637172-8811

## By Fax

General: 86-21-3965-0654 Sales: 86-21-3463-7458

#### By Email

General: china@semiware.com.cn Sales: sales33@semiware.com.cn

Technical Support: fae03@semiware.com.cn

 ${\tt COPYRIGHT} @ Semiware\ 2017\ -\ This\ literature\ is\ subject\ to\ all\ applicable\ copyright\ laws\ and\ is\ not\ for\ resale\ in\ any\ manner.$ 

SPECIFICATIONS: Semiware reserves the right to change the electrical and or mechanical characteristics described herein without notice.

DESIGN CHANGES: Semiware reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance. Semiware assumes no responsibility with respect to the selection or specifications of such products. Semiware makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Semiware assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special, consequential or incidental damages.

 $\textbf{LIFE SUPPORT POLICY: Semiware products are not authorized for use in life support systems without written consent from the factory of the product of th$ 



# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for semiware manufacturer:

Other Similar products are found below:

P0640SC P2300SB SMBJ48CA SMBJ40CA SMBJ12A SESM05 SMBJ43CA SMBJ11CA SMBJ45A SMBJ51CA SMBJ58CA SMBJ18A SMBJ15A P0640SB SMBJ6.0CA SMBJ6.0A P3100TA SMBJ7.0CA SMBJ10A P3100SC SMBJ30A SMBJ13CA SMF6.0CA SMBJ58A SMF15CA P0640TA P3100SA P2300SC SMBJ8.0CA P3500SA P4200SA SEULC0524PA SMBJ5.0A SELC24CI SMBJ20CA P3500SC SMBJ45CA P0080SB SMBJ28CA SMBJ14CA SMBJ33A SELC12CI SESLVU2.8-4 SMBJ16CA SMF5.0CA SMBJ26CA SMBJ40A SMBJ16A SMBJ75CA SMBJ22A