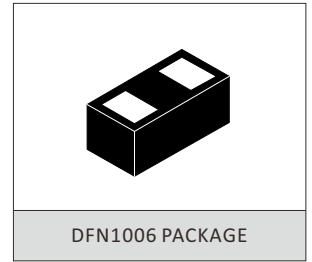


## DESCRIPTION

The SE10F10U7.0A is Uni-directional transient voltage 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 SE10F10U7.0A is safely dissipating ESD strike to meet the ESD immunity testing of IEC61000-4-2 level 4. The SE10F10U7.0A is available in a DFN1006 package with Pb-free.

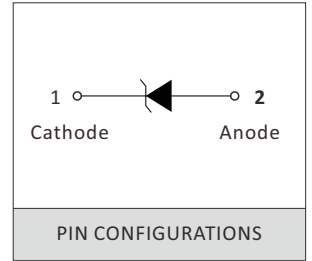


## FEATURES

- > 100 Watts Peak Pulse Power per Line (tp=8/20μs)
- > Protects one Unidirectional I/O line
- > Working voltages : 7.0V
- > 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) ±30kV (air), ±22kV (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).	PPM	100	Watts
Operating Temperature Range.	T <sub>J</sub>	-55~+125	°C
Storage Temperature Range.	T <sub>STG</sub>	-55~+150	°C

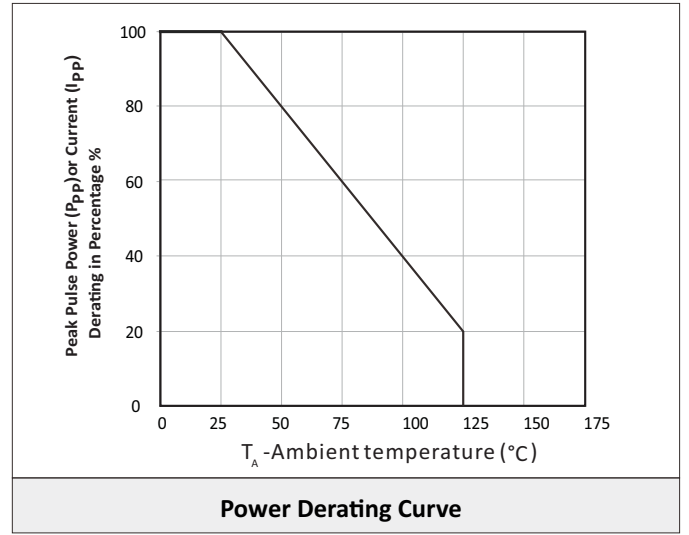
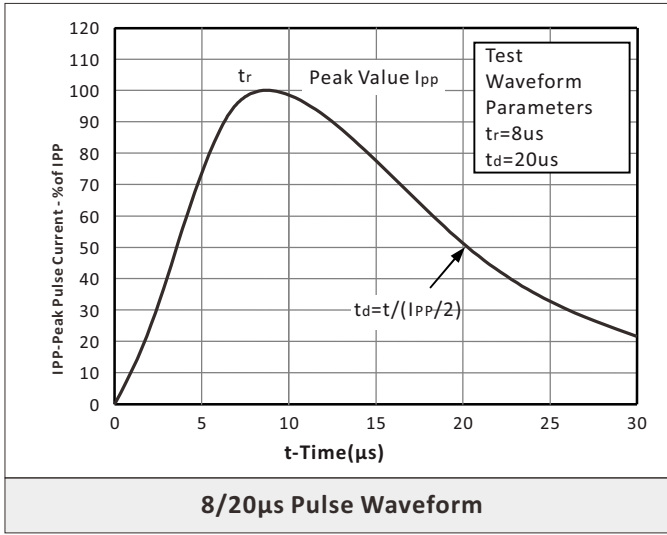
Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

## ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	Reverse Stand-off Voltage Max.	Breakdown Voltage Min.	Test Current	V <sub>c</sub> (V) @5A	V <sub>c</sub> (V)		Junction Capacitance Max.	Reverse Leakage Max.
		V <sub>RWM</sub> (V)	V <sub>BR</sub> (V)	I <sub>T</sub> (mA)	Max.	@A	C <sub>T</sub> (PF)	I <sub>R</sub> (μA)	
SE10F10U7.0A	YC	7.0	8.5	1	15	18	6	65	1.0

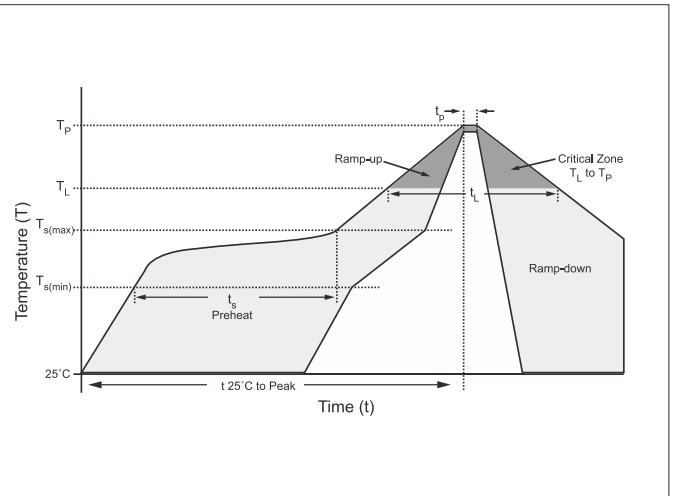


### CHARACTERISTIC CURVES



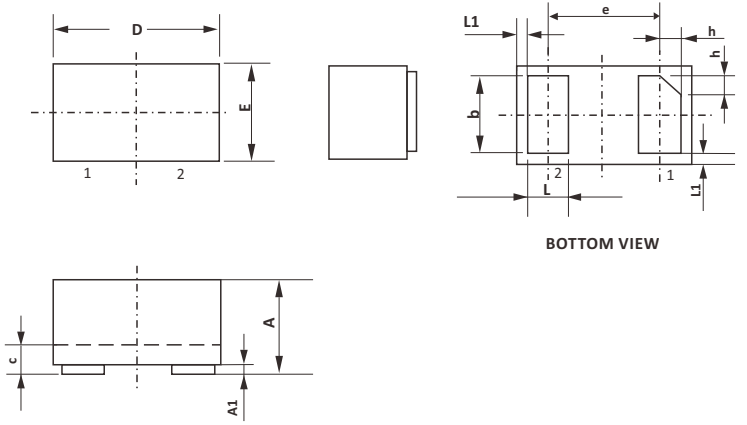
### REFLOW PROFILE

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 ramp 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 Temperature (Tp)		260°C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (Tp)		8 minutes Max.
Do not exceed		260°C



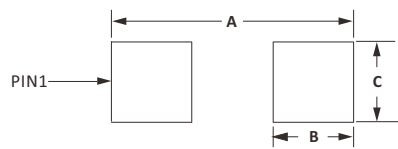
### DFN1006 PACKAGE DIMENSIONS

OUTLINED DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.40	0.50	0.016	0.020
A1	0	0.05	0	0.002
b	0.40	0.60	0.016	0.024
c	0.12	0.18	0.005	0.007
D	0.95	1.05	0.037	0.041
e	0.65TYP		0.026TYP	
E	0.55	0.65	0.022	0.026
L	0.15	0.35	0.006	0.014
L1	0.05REF		0.002REF	
h	0.07	0.17	0.003	0.007



### RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	MILLIMETERS	INCHES
A	1.20	0.047
B	0.47	0.019
C	0.60	0.024



### ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE10F10U7.0A	DFN1006	10000PCS	7"



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