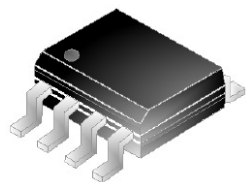
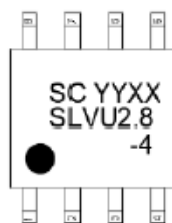


550W Surface Mount TVS For ESD Protection Device
FEATURES

- 550 Watts peak pulse power (tp=8/20μs)
- Protects Two Line Pairs (Four lines)
- Low capacitance
- Low leakage current
- Low operating and clamping voltage
- Solid-state Punch through Avalanche TVS process technology

MECHANICAL DATA

- Case : Molded plastic,SOP-8
- Polarity : Shown follows
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

SOP-8 PACKAGE

Marking Information


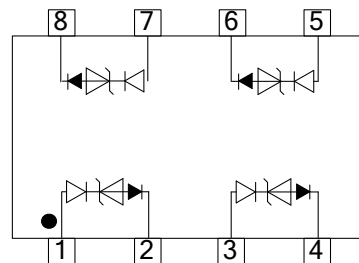
YYXX= Date Code
Dot denotes Pin1

APPLICATIONS

- Switching Systems
- WAN/LAN Equipment
- Desktops, Servers, Notebooks& Handhelds
- 10/100,1000M Ethernet
- Base Stations
- Audio/Video Inputs

IEC COMPATIBILITY

- IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 22A (8/20μs)

SCHEMATIC & PIN CONFIGURATION


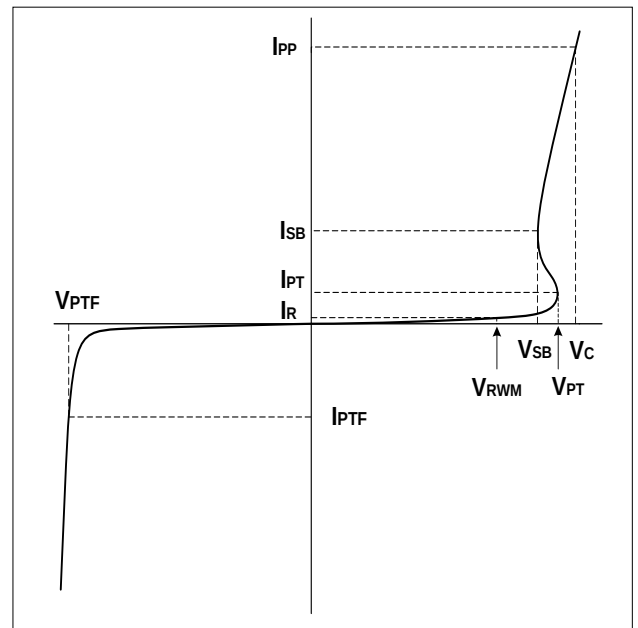


550W Surface Mount TVS For ESD Protection Device

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$) see Figure1 & Figure2	P_{PP}	550	Watts
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	22	A
Lead Soldering Temperature	T_L	260(10sec)	℃
Operating Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{STG}	-55 to +150	℃

Electrical Parameters (T=25℃)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{PT}	Punch-through Breakdown Voltage @ I_T
V_{SB}	Snap-Back Voltage @ I_{SB}
I_{SB}	Snap-Back Current
I_{PT}	Test Current
V_{PTF}	Forward Punch-through Breakdown Voltage @ I_F
I_{PTF}	Forward Test Current



Electrical Characteristics(T=25℃)

DCS2.8-4LCBW						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}	See Note1			2.8	V
Punch-through Voltage	V_{PT}	$I_{PT}=2\mu A$, See Note1	3.0			V
Reverse Leakage Current	I_R	$V_{RWM}=2.8V$ See Note1			1	μA
Snap-Back Voltage	V_{SB}	$I_{SB}=50mA$, See Note1		2.8		V

Electrical Characteristics (Cont.)

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Clamping Voltage (Note1)	V_C	$I_{PP}=2A$, $t_p=8/20\mu s$ See Note1			6	V
Clamping Voltage	V_C	$I_{PP}=5A$, $t_p=8/20\mu s$ See Note1			9.5	V
Clamping Voltage	V_C	$I_{PP}=22A$, $t_p=8/20\mu s$ See Note1			25	V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$ See Note1		1.6	2.0	pF
Steer Diodes						
Reverse Breakdown Voltage	V_{BR}	$I_T = 10\mu A$ See Note4	80			V
Reverse Leakage Current	I_R	$V_{RWM} = 2.8V$ See Note4			1	μA
Forward Voltage (Note3)	V_F	$I_F = 1A$ See Note5			2	V

NOTES:

1. Device measured between pin 1 to 2, pin 3 to 4, pin 5 to 6 and pin 7 to 8.
2. The 8/20 μs test pulse wave is shown in figure3, and the clamping voltage vs. I_{PP} is shown in figure4 .
3. The Junction Capacitance vs. Reverse Voltage is shown in figure5.
4. Each Steer Diode integrated in the WS2.8-4LVUB reversely connected with a TVS Diode in series
5. The Forward Voltage vs. Forward Current for Steer diode is shown in figure6.

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

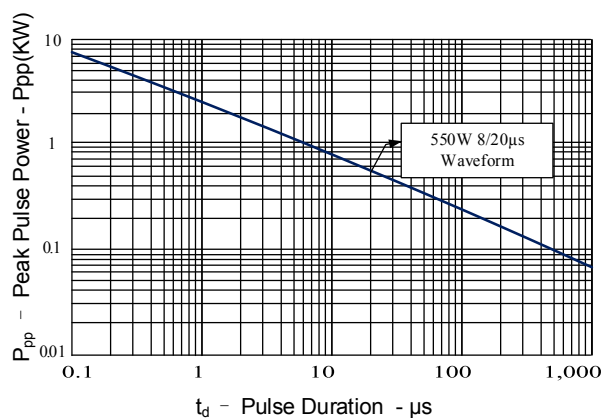


Figure 2: Power Derating Curve

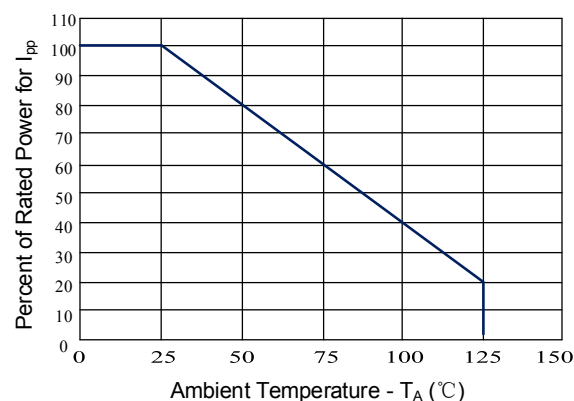


Figure3: Pulse Waveform

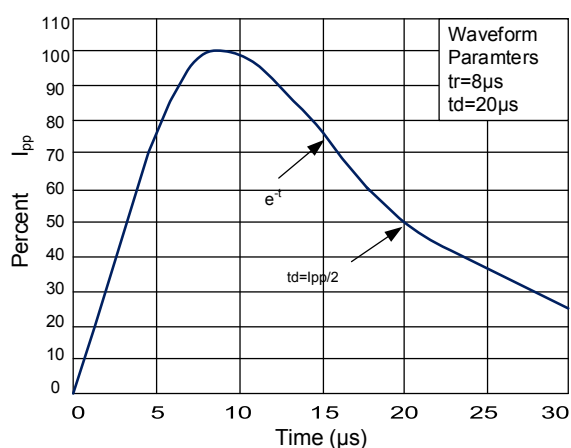


Figure 4: Clamping Voltage vs. Peak Pulse Current

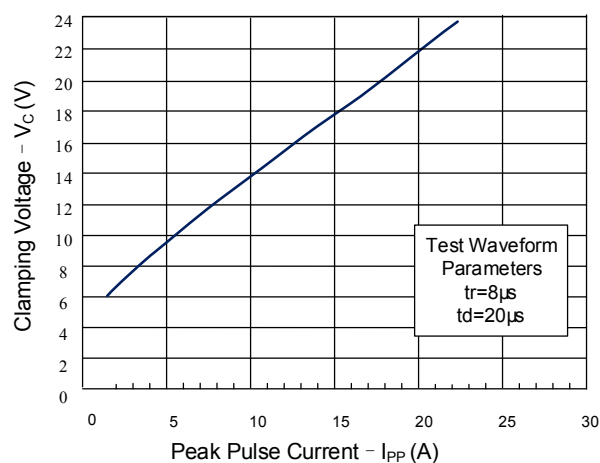


Figure 5: Capacitance vs. Reverse Voltage

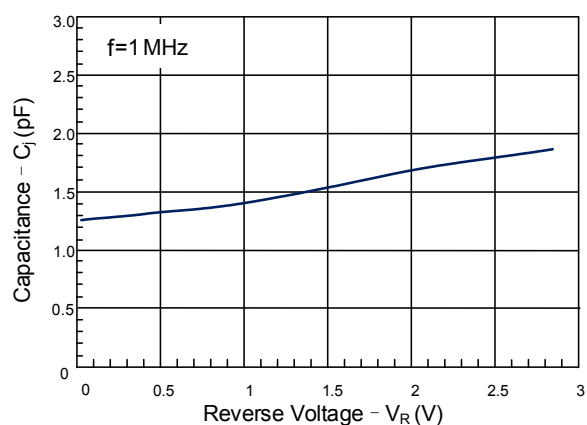
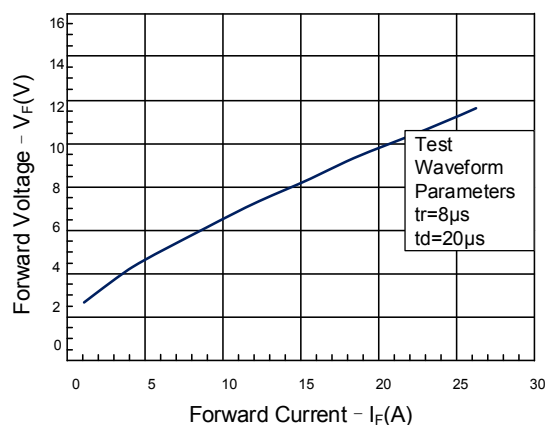
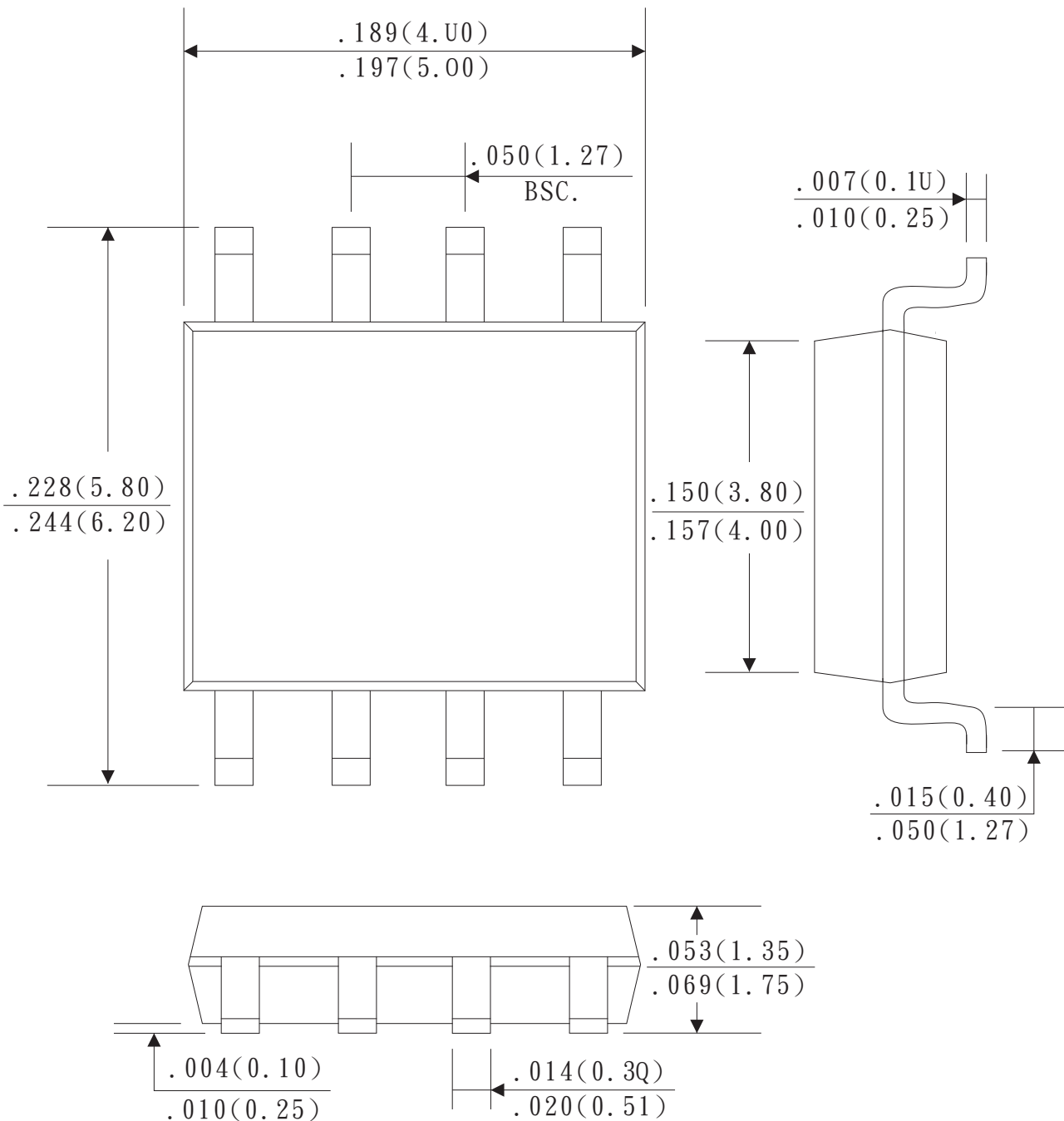


Figure 6: Forward Voltage vs. Forward Current



Outline Drawing

SOP-8



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
SESD2.8-4LCBW -T ⁽¹⁾ H ⁽²⁾ -WS	Tape&Reel: 2.5 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

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