

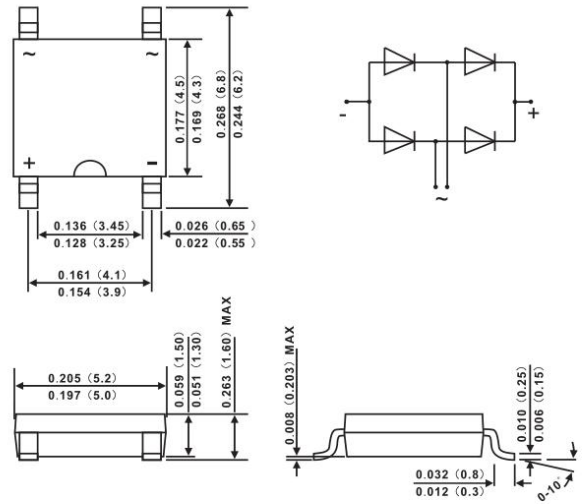
**UBS1 THRU UBS10**
**VOLTAGE RANGE** 100 to 1000 Volts  
**CURRENT** 1.0 Ampere

**Features**

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260°C/10 seconds at terminals

**Mechanical Data**

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- LeadP: Plated terminals solderable per MIL-STD-202E method 208C
- Weight: 0.003 ounce, 0.10 grams

**ABS**


Dimensions in inches and (millimeters)

**Maximum Ratings and Electrical Characteristics**

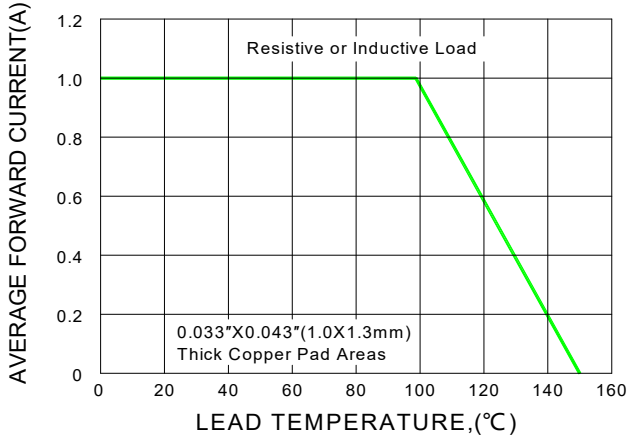
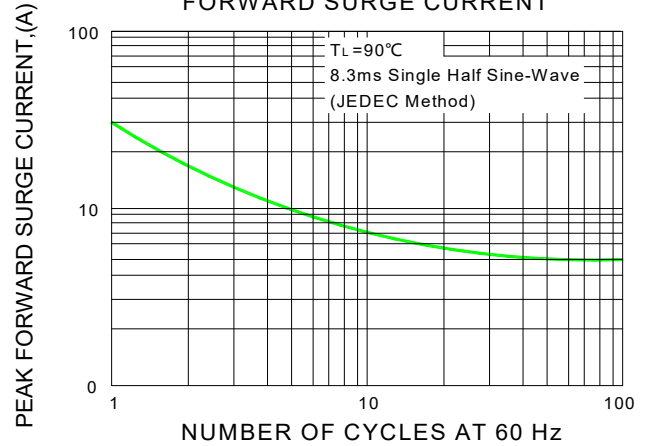
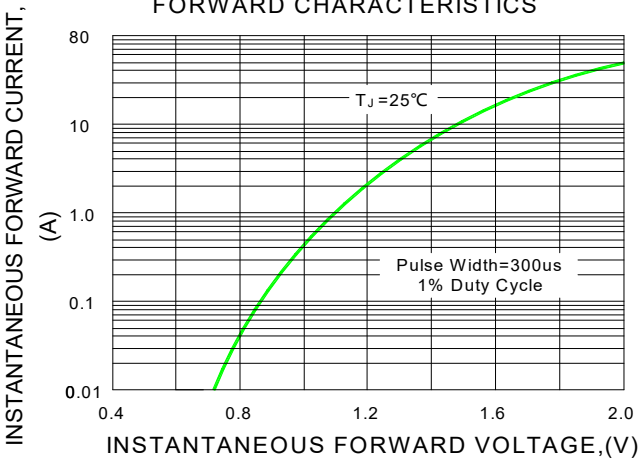
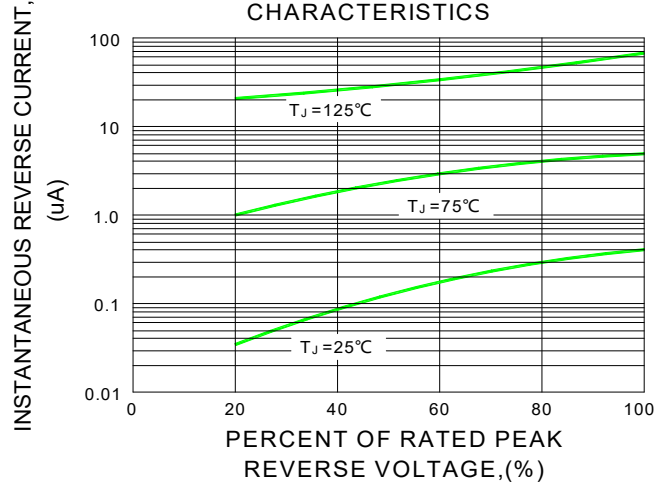
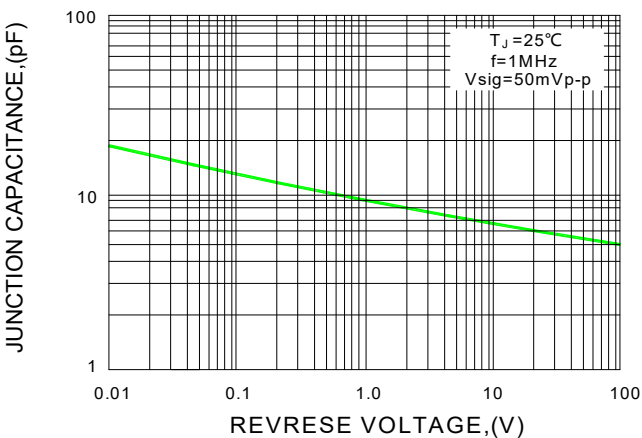
- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

TYPE NUMBER	SYMBOLS	UBS1	UBS2	UBS4	UBS6	UBS8	UBS10	UNIT
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at $T_L=100^\circ\text{C}$	$I_{(AV)}$	1.0						Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30						Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	3.7						$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A	$V_F$	1.1						Volts
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	5						$\mu\text{Amps}$
	$T_A=125^\circ\text{C}$	50						
Typical Junction Capacitance (NOTE 1)	$C_J$	25						pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	70						$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	(-55 to +150)						$^\circ\text{C}$

**Notes:**

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C.B. with 0.033"x0.043"(1.00mm×1.30mm) copper pads.

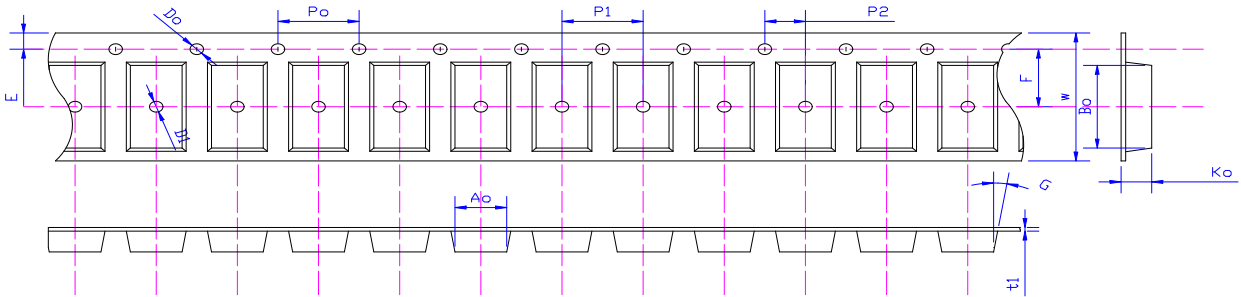
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**Ratings and Characteristic Curves (TA=25°C unless otherwise noted)**
**F1G.1-FORWARD CURRENT DERATING CURVE**

**F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**F1G.4-TYPICAL REVERSE CHARACTERISTICS**

**F1G.5-TYPICAL JUNCTION CAPACITANCE**


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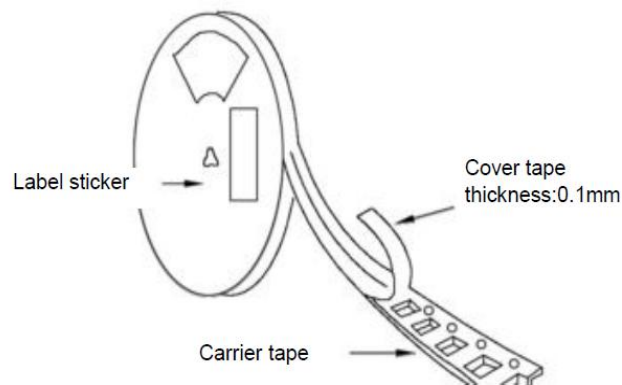
**Packing Requirements**

- PS black anti-static carrier tape packing

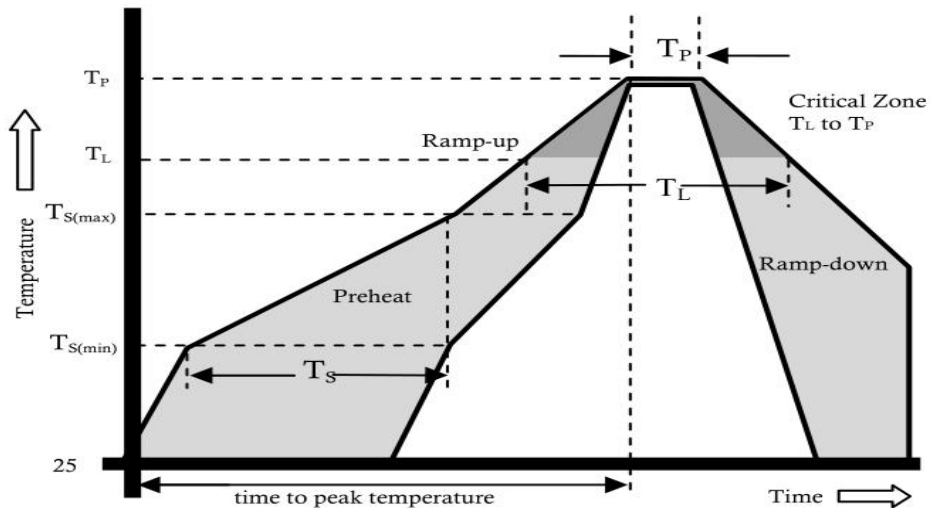


Specifications	$A_o$	$B_o$	$K_o$	$P_o$	$W$	$t_1$
ABS	$5.31 \pm 0.10$	$6.68 \pm 0.10$	$1.59 \pm 0.10$	$4.00 \pm 0.1$	$12.0 \pm 0.10$	$0.30 \pm 0.02$

- 13" antistatic plastic reel



DEVICE TYPE	13" Reel			
	Q'TY/REEL(pcs)	REEL/BOX	BOX/CARTOON	Q'TY/CARTON(pcs)
ABS	5000	2	8	80000

**Reflow Profile**


Reflow Condition		Pb-Free Assembly
Pre Heat	Temperature Min.	+150°C
	Temperature Max.	+200°C
	Time(Min to Max)	60-180 secs.
Average ramp up rate(Liquidus Temp( $T_L$ ) to peak)		3°C/sec. Max.
$T_{S(max)}$ to $T_L$ - Ramp-up Rate		3°C/sec. Max.
Reflow	Temperature ( $T_L$ )(Liquidus)	+217°C
	Temperature ( $T_L$ )	60-150 secs.
Peak Temp ( $T_P$ )		+(260+0/-5) °C
Time within 5°C of actual Peak Temp ( $T_P$ )		25 secs.
Ramp-down Rate		6°C/sec. Max.
Time 25°C to peak Temp ( $T_P$ )		8 min. Max.
Do not exceed		+260°C