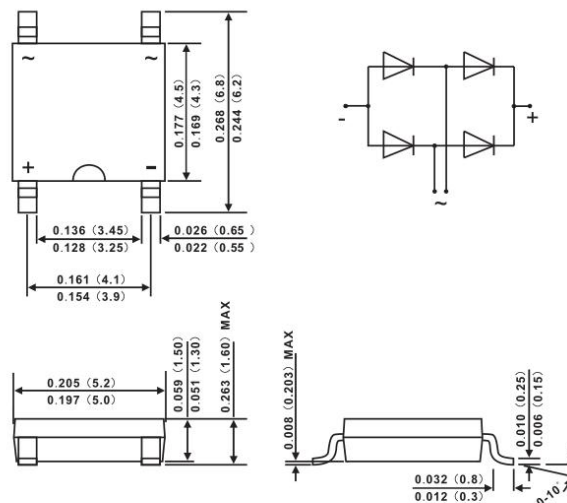


**ABS201 THRU ABS210****VOLTAGE RANGE****50 to 1000 Volts****CURRENT****2.0 Ampere****Features**

- Glass passivated chip
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260°C/10S at terminals
- Component in accordance to ROHS 2002/95/1 and WEEE 2002/96/EC

**ABS**

Dimensions in inches and (millimeters)

**Mechanical Data**

- Case: Molded plastic body
- Molding compound meets UL 94 V-0 flammability rating, Halogen-free, RoHS-compliant, and commercial grade
- Polarity: Molded on body
- Weight: 0.003 ounce, 0.10 grams

**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	SYMB OLS	ABS 201	ABS 202	ABS 203	ABS 204	ABS 206	ABS 208	ABS 210	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current $T_L=100^\circ\text{C}$	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60							Amps
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_A = 125^\circ\text{C}$	100							
Typical Junction Capacitance (Note 1)	$C_J$	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	26							$^\circ\text{C/W}$
	$R_{\theta JL}$	65							
Operating Junction 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. Thermal Resistance test performed in accordance with JEDEC-51. Unit mounted on 15mm\*12mm\*1.6mm AL pad attach 195mm\*110mm\*10mm steel plate.
3. The typical data above is for reference only.



ABS201 THRU ABS210

VOLTAGE RANGE

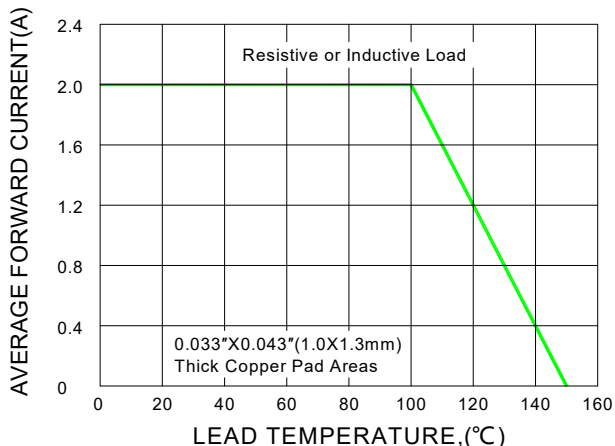
50 to 1000 Volts

CURRENT

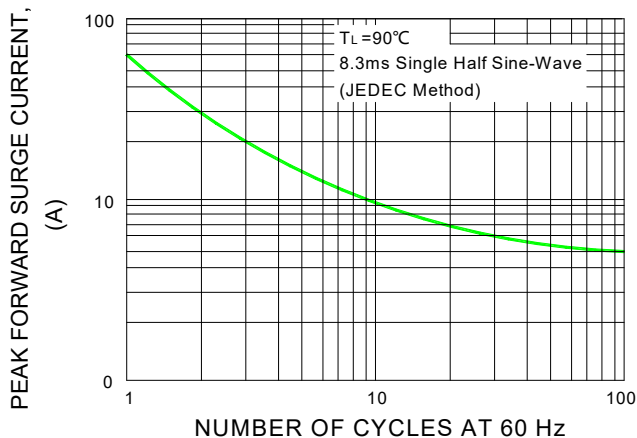
2.0 Ampere

Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

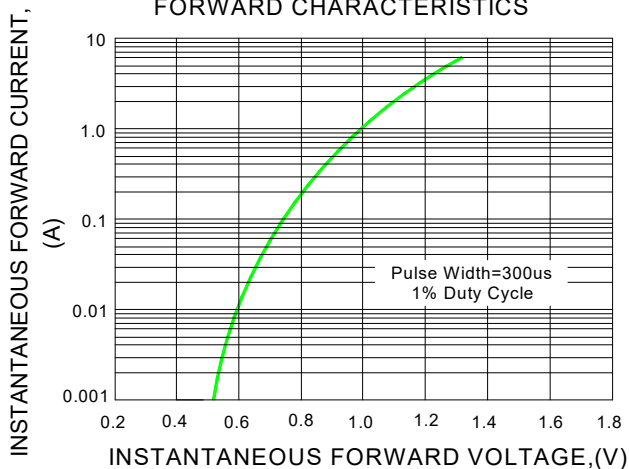
F1G.1-FORWARD CURRENT DERATING CURVE



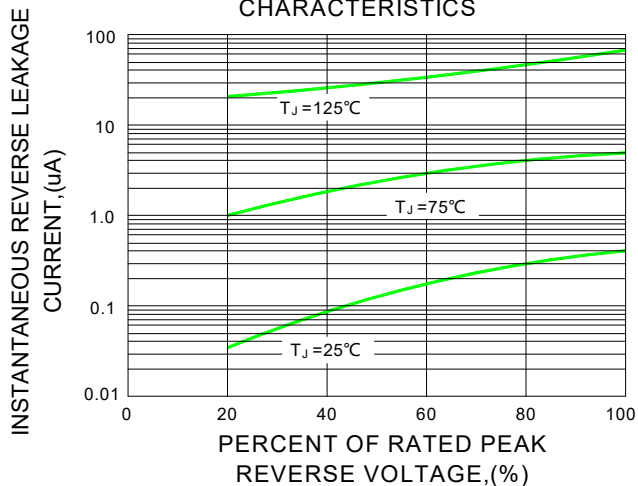
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



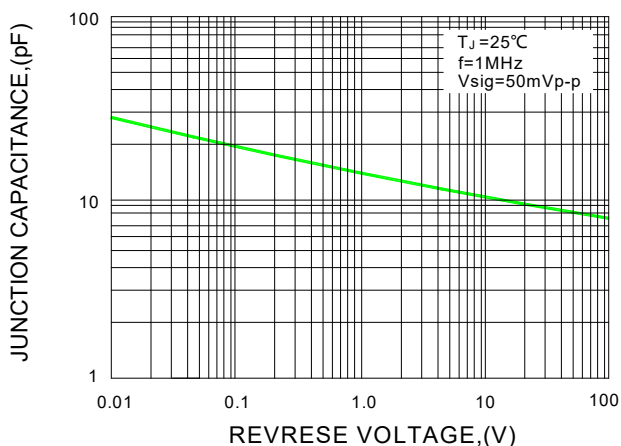
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE





ABS201 THRU ABS210

VOLTAGE RANGE

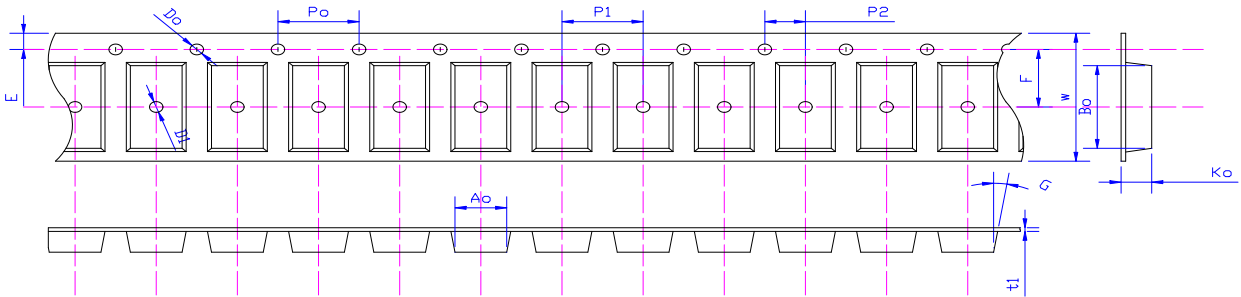
50 to 1000 Volts

CURRENT

2.0 Ampere

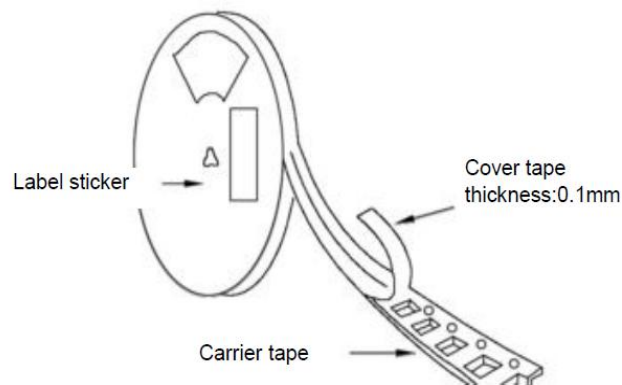
Packing Requirments

- PS black anti-static carrier tape packing

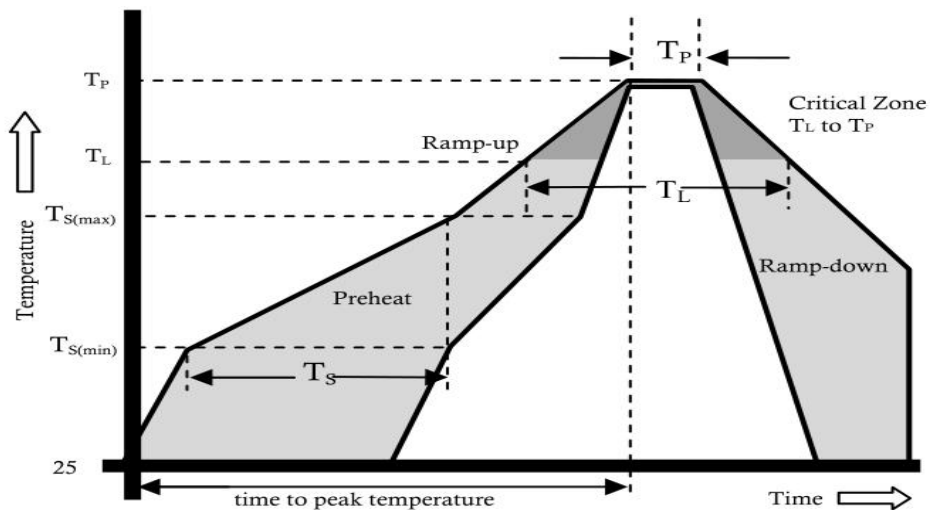


Specifications	$A_o$	$B_o$	$K_o$	$P_o$	$W$	$t_1$
ABS	$5.31 \pm 0.10$	$6.68 \pm 0.10$	$1.59 \pm 0.10$	$4.00 \pm 0.1$	$12.0 \pm 0.10$	$0.30 \pm 0.02$

- 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