



**JBSL Plastic-Encapsulate Bridge Rectifier**

**JBSL410 Fast Recovery Bridge Rectifier**

**Features**

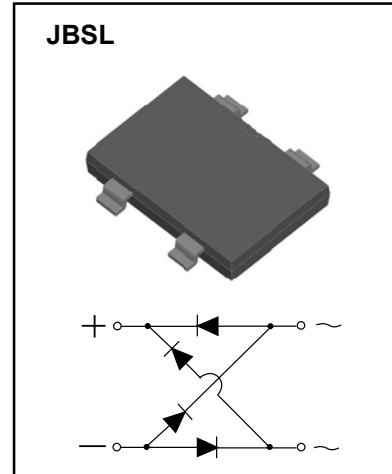
- $I_{F(AV)}$  4A
- $V_{RRM}$  1000V
- High surge current capability
- Glass passivated chip

**Applications**

- General purpose 1 phase Bridge rectifier applications

**Marking**

- JBSL410



**Limiting Values (Absolute Maximum Rating)**

Item	Symbol	Unit	Conditions		JBSL410
Repetitive Peak Reverse Voltage	$V_{RRM}$	V			1000
Maximum RMS Voltage	$V_{RMS}$	V			700
Maximum DC Blocking Voltage	$V_{RRM}$	V			1000
Average Rectified Output Current	$I_o$	A	60Hz sine wave, R-load, $T_c=80^\circ C$	On alumina substrate	4.0
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	8.3ms sine wave, 1 cycle, $T_j=25^\circ C$		120
Current Squared Time	$I^2t$	$A^2S$	$1ms \leq t < 8.3ms$ $T_j=25^\circ C$ , Rating of per diode		60
Operation Junction and Storage Temperature Range	$T_j, T_{stg}$	$^\circ C$			-55 ~+150

**Electrical Characteristics (T=25°C Unless otherwise specified)**

Item	Symbol	Unit	Test Condition		JBSL410
Maximum Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=4.0A$ , Pulse measurement, Rating of per diode		1.1
Maximum Peak Reverse Current	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	$T_A=25^\circ C$	5
	$I_{RRM2}$	$\mu A$		$T_A=100^\circ C$	100
Typical junction capacitance	$C_j$	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C		50
Thermal Resistance	$R_{\theta J-A}$	$^\circ C/W$	Between junction and ambient, On alumina substrate		60
	$R_{\theta J-L}$		Between junction and lead		10
	$R_{\theta J-C}$		Between junction and case		15

# Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

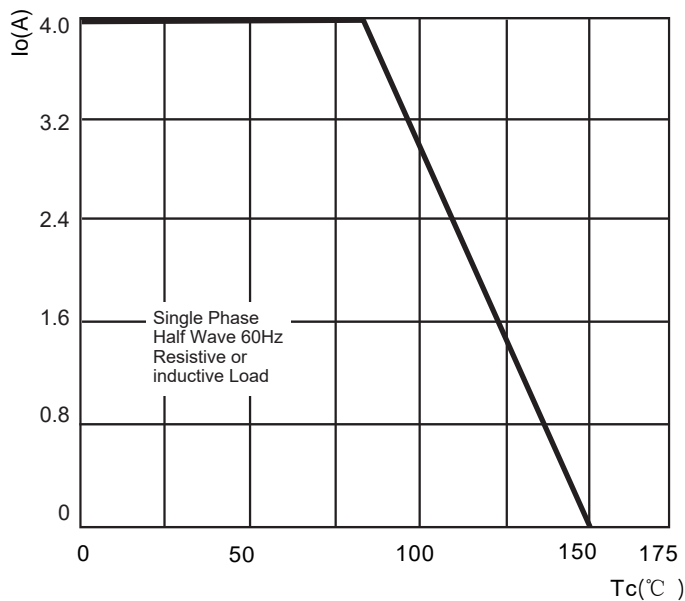


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

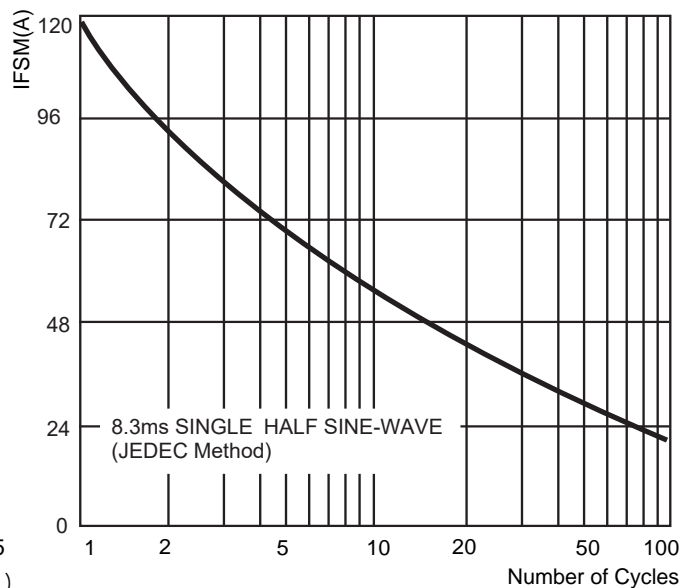


FIG.3: TYPICAL FORWARD CHARACTERISTICS

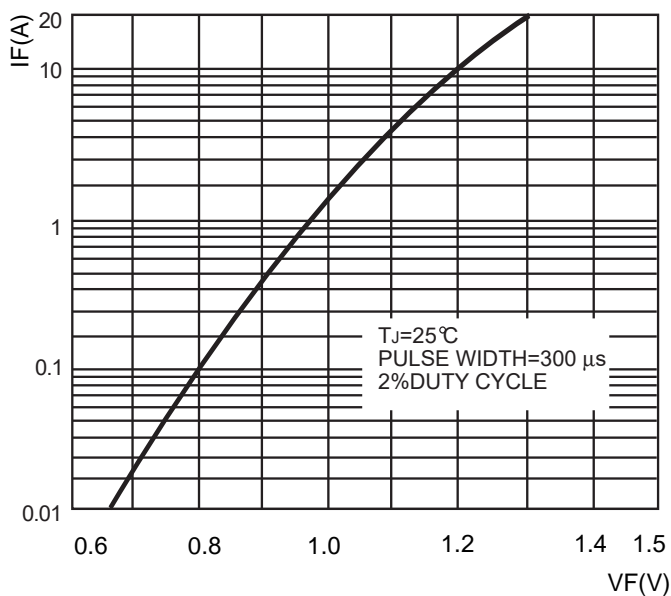
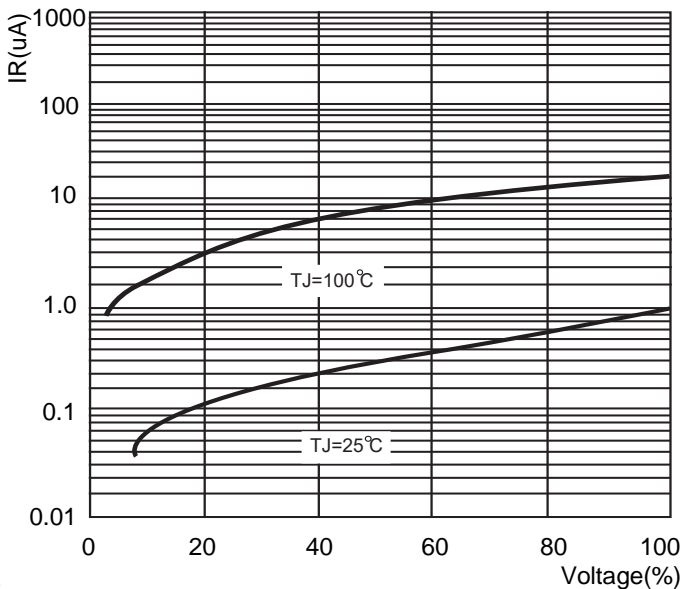
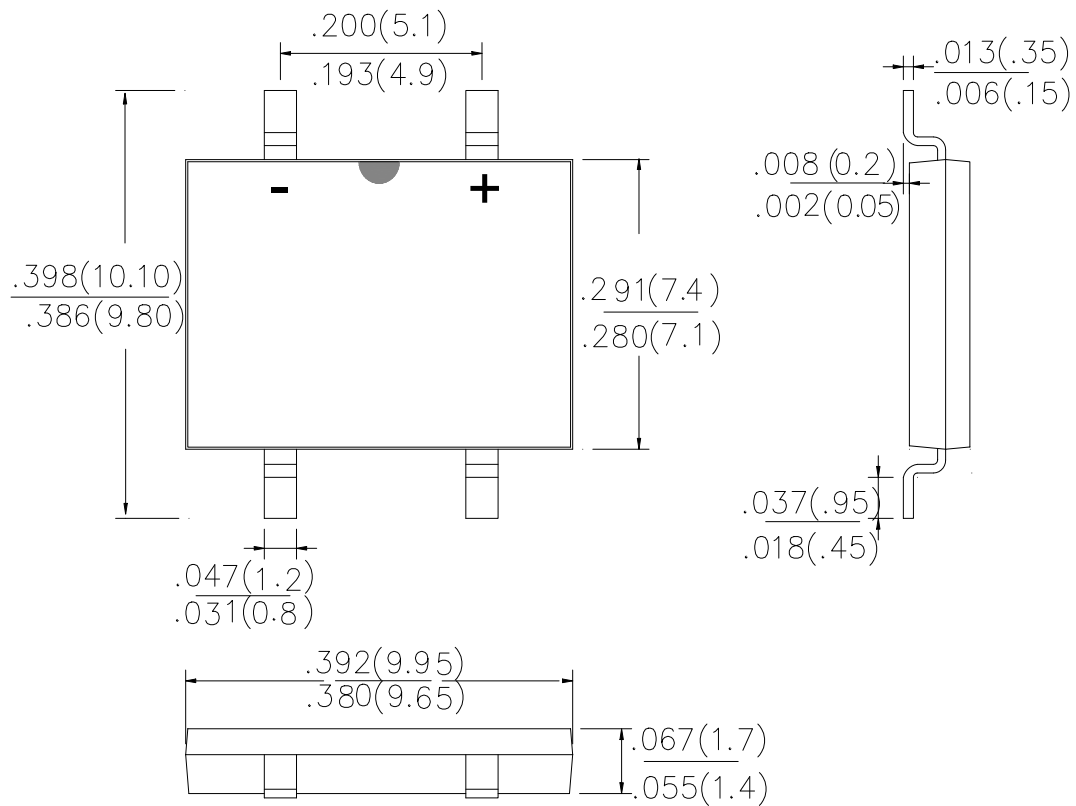


FIG.4: TYPICAL REVERSE CHARACTERISTICS

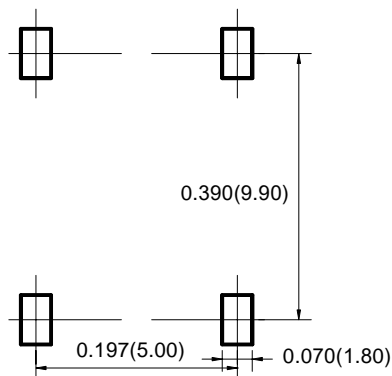


## JBSL Package Outline Dimensions



Dimensions in inches and (millimeters)

## JBSL Suggested Pad Layout



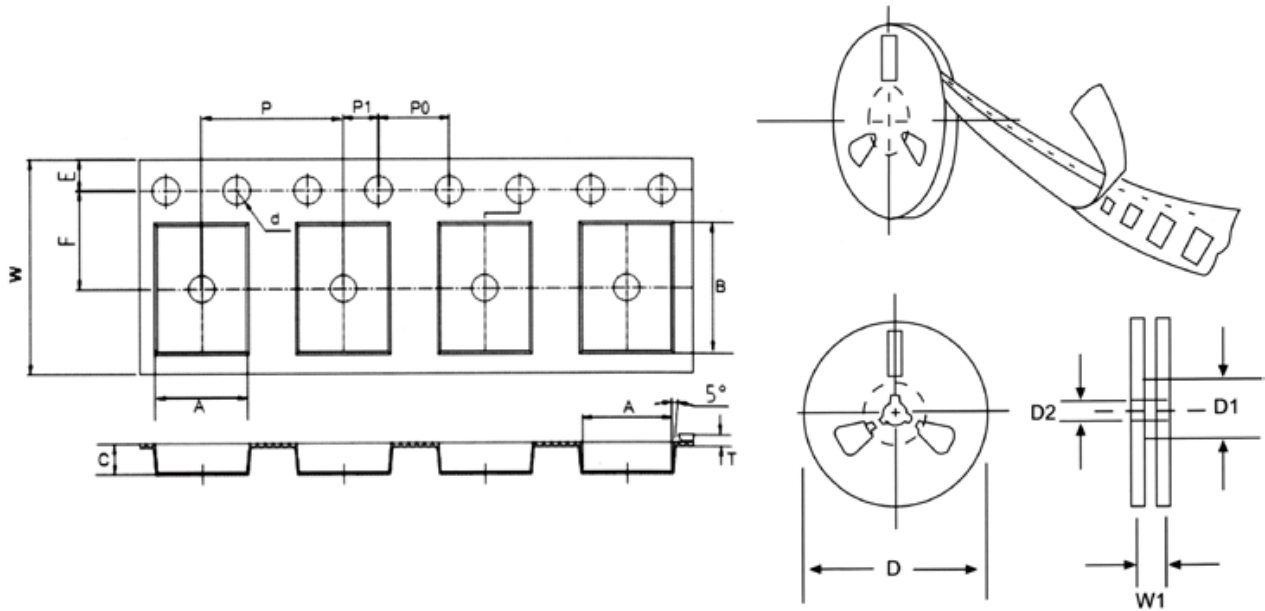
**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

**NOTICE**

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

# Reel Taping Specifications For Surface Mount Devices–JBSL



**FIG: CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING**

ITEM	SYMBOL	ABS mm(inch)
Carrier width	A	5.40+0.1(0.213+0.004)
Carrier length	B	6.90+0.05(0.272+0.002)
Carrier depth	C	2.10+0.1(0.083+0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75±1.0 ( 2.95 ±0.039)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Sprocket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	5.5+0.05(0.217+0.002)
Punch hole pitch	P	8.0+0.1(0.315+0.004)
Sprocket hole pitch	P0	4.0+0.1(0.157+0.004)
Embossment center	P1	2.0+0.1(0.079+0.004)
Total tape thickness	T	0.10-0.70(0.004-0.028)
Tape width	W	12.0+0.3/-0.1(0.472+0.004)
Reel width	W1	16.8+2.0(0.661+0.079)

NOTE: Devices are packed in accordance with EIA standard RS-481-A and specification given above.