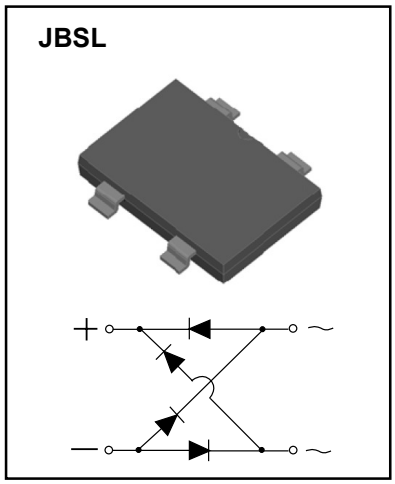
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

JBSL Plastic-Encapsulate Bridge Rectifier

RJBSL510 Fast Recovery Bridge Rectifier

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 1000V
- High surge current capability
- Glass passivated chip



Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- RJBSL510

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		RJBSL510
Repetitive Peak Reverse Voltage	V_{RRM}	V			1000
Maximum RMS Voltage	V_{RMS}	V			700
Maximum DC Blocking Voltage	V_{DC}	V			1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load,Tc=80℃	On alumina substrate	5.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	8.3ms sine wave, 1 cycle, T_j=25℃		150
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃， Rating of per diode		93
Operation Junction and Storage Temperature Range	T_J,T_{stg}	℃			-55 ~+150

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	RJBSL510
Maximum Peak Forward Voltage	V_{FM}	V	I_{FM}=5.0A, Pulse measurement, Rating of per diode	1.3
Maximum Peak Reverse Current	I_{RRM}	μA	V_{RM}=V_{RRM}, Ta=25℃	5
			V_{RM}=V_{RRM}, Ta=100℃	100
Maximum reverse recovery time	trr	ns	I_F=0.5A,I_R=1.0A,Irr=0.25A	500
Typical junction capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.	50
Typical thermal resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient, On alumina substrate	60
	$R_{\theta J-C}$		Between junction and case	15
	$R_{\theta J-L}$		Between junction and lead	10

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

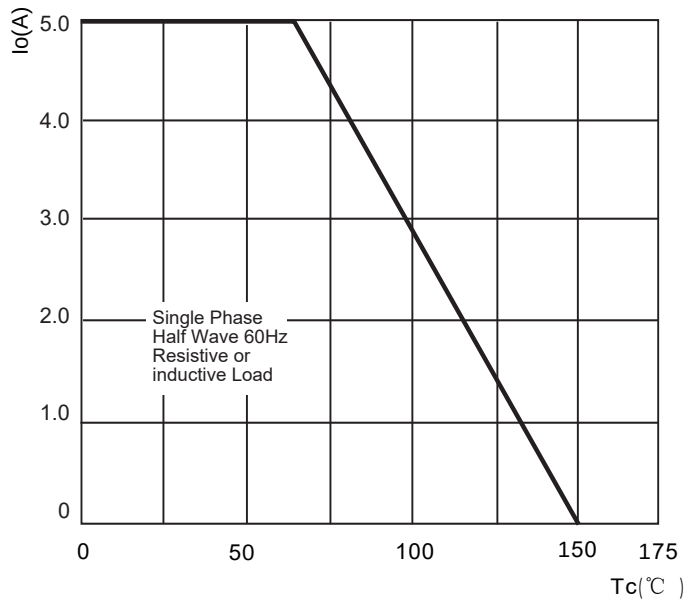


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

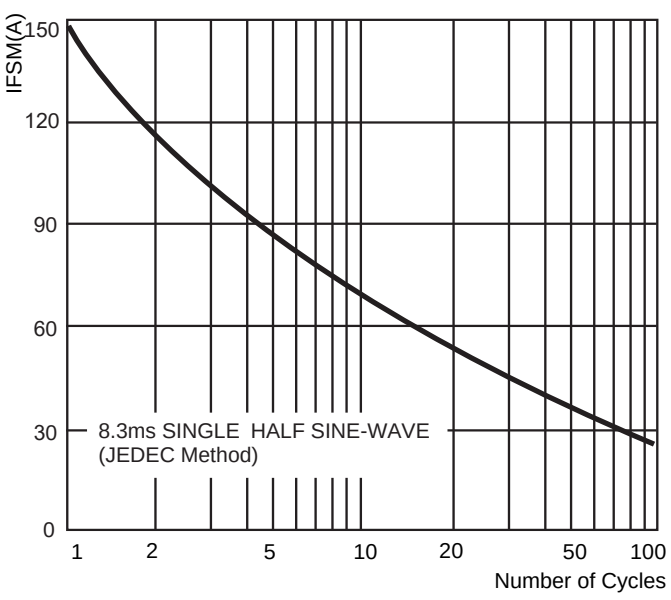


FIG.3: TYPICAL FORWARD CHARACTERISTICS

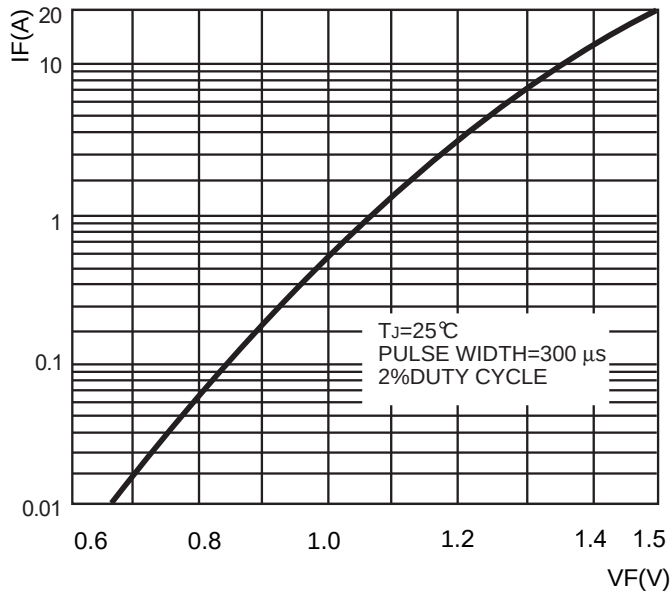
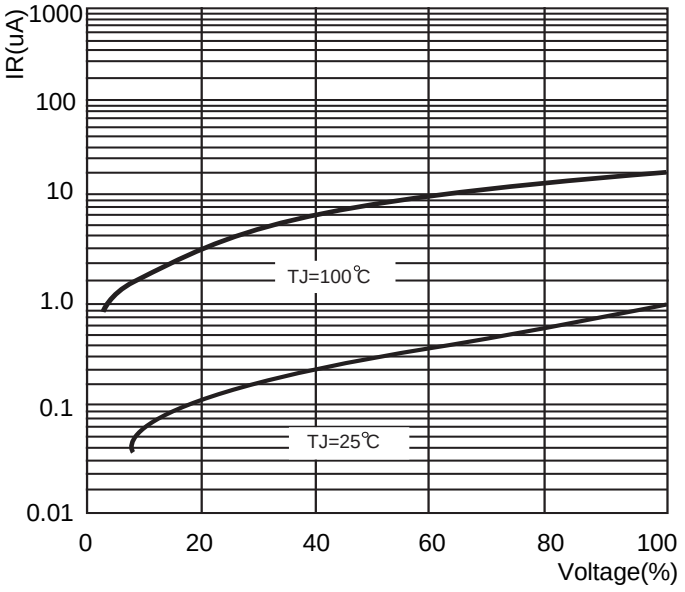
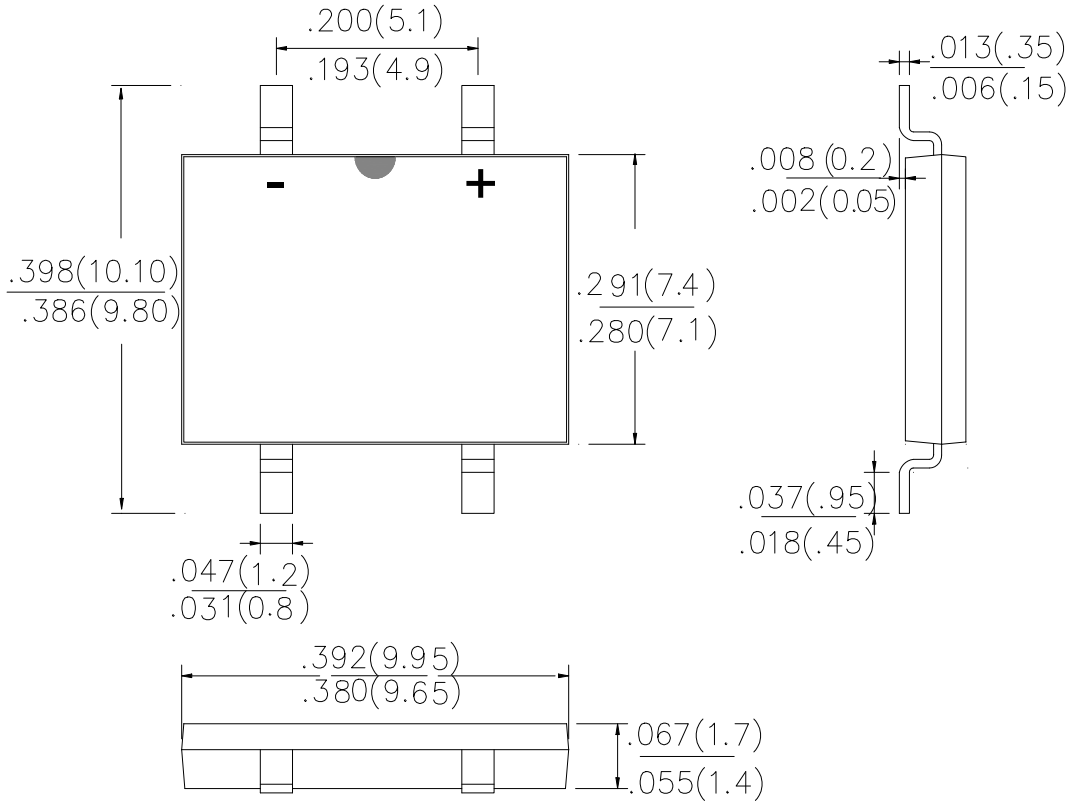


FIG.4:TYPICAL REVERSE CHARACTERISTICS

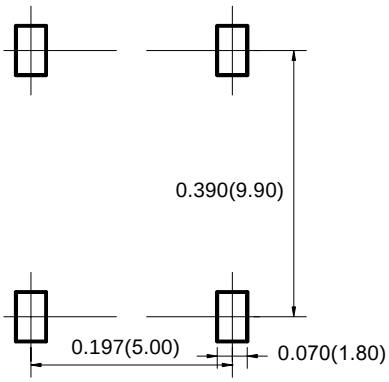


JBSL Package Outline Dimensions



Dimensions in inches and (millimeters)

JBSL Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
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.

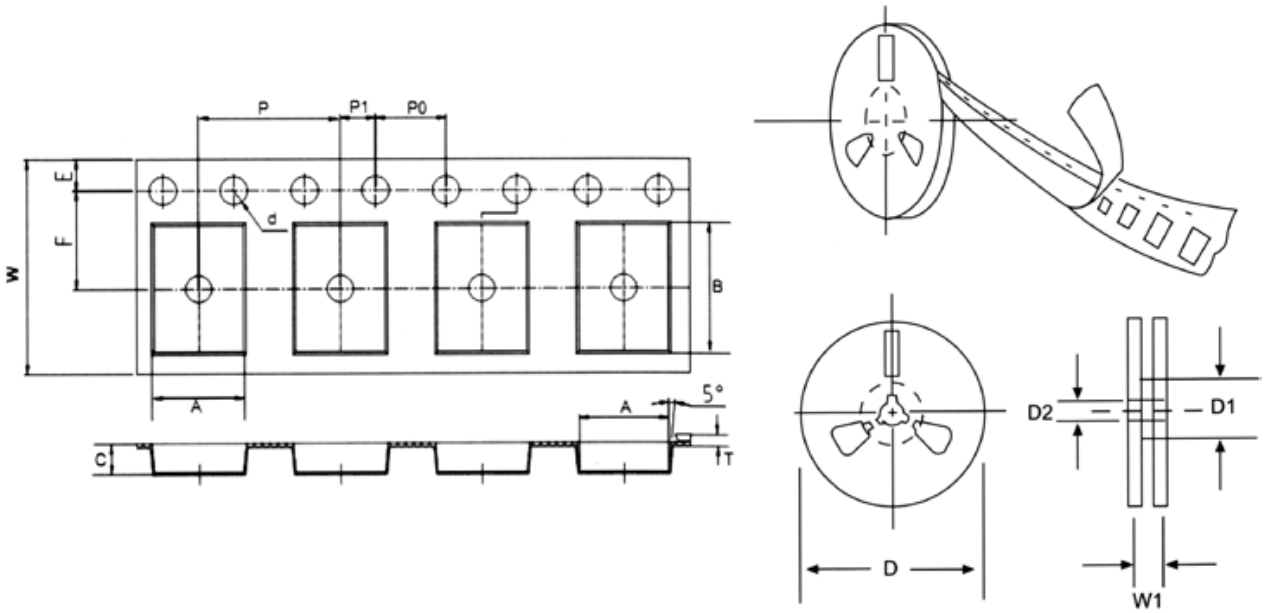


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	ABS mm(inch)
Carrier width	A	10.10±0.1(0.398±0.004)
Carrier length	B	10.4±0.2(0.409±0.008)
Carrier depth	C	2.00±0.1(0.079±0.004)
Sprocket hole	d	1.50+0.1/-0(0.059+0.004/-0)
Reel outside diameter	D	330±2.0(13.0±0.079)
Reel inner diameter	D1	75±1.0(2.95±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Stroket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	11.5±0.15(0.453±0.006)
Punch hole pitch	P	12.0±0.05(0.472±0.002)
Sprocket hole pitch	P0	4.0±0.05(0.157±0.002)
Embossment center	P1	2.00±0.05(0.079±0.002)
Totall tape thickness	T	0.35±0.05(0.014±0.002)
Tape width	W	24.0±0.15(0.945±0.006)
Reel width	W1	24.4±0.2(0.961±0.008)

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