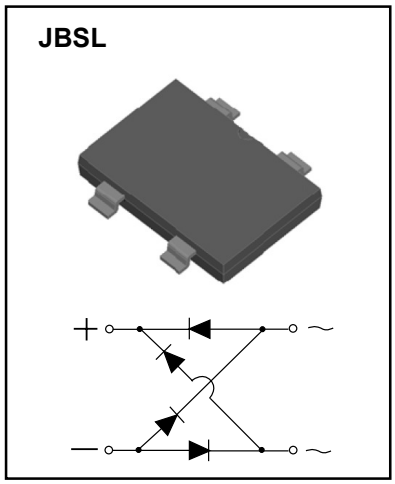
SZCJ Shenzhen Changji Semiconductor Co., LTD.

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

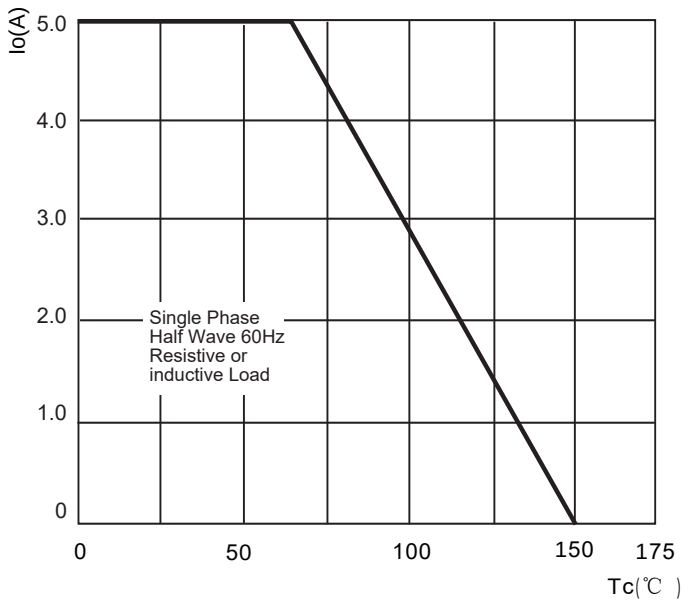


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

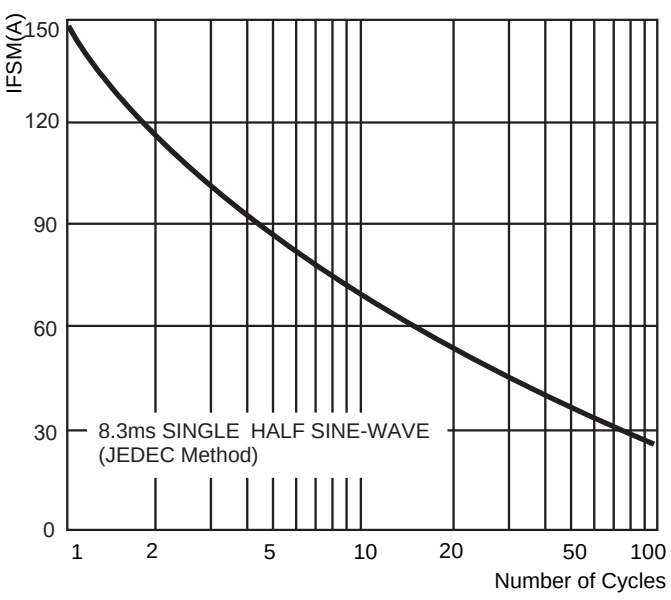


FIG.3: TYPICAL FORWARD CHARACTERISTICS

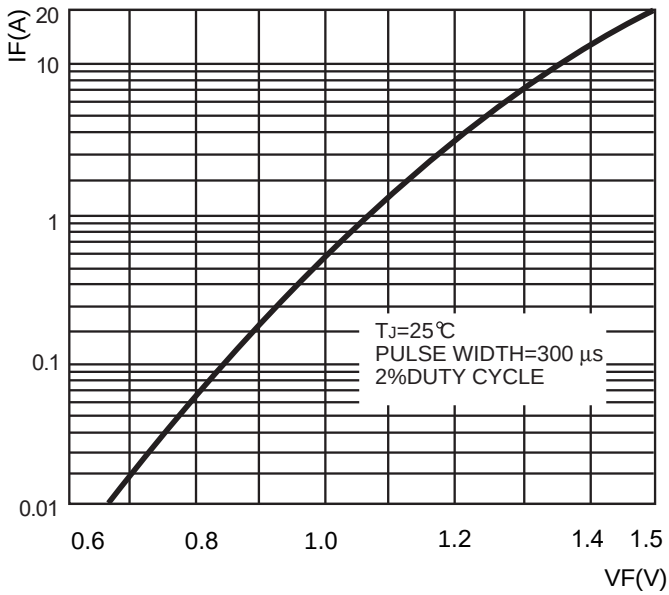
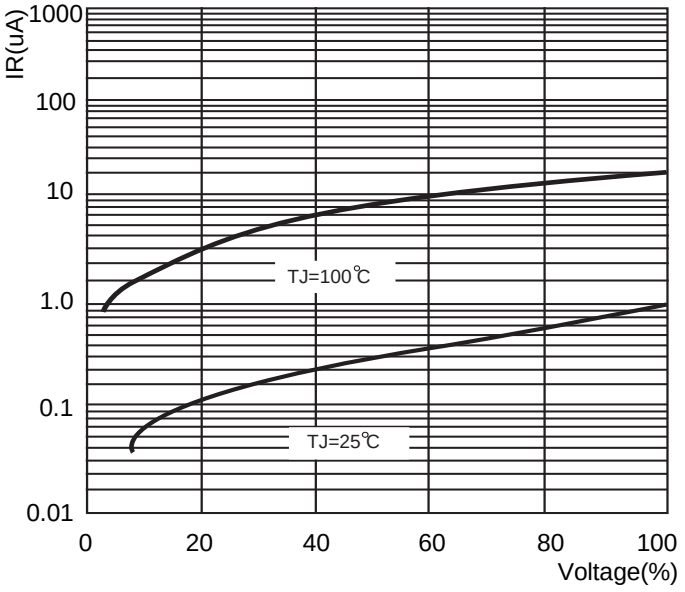
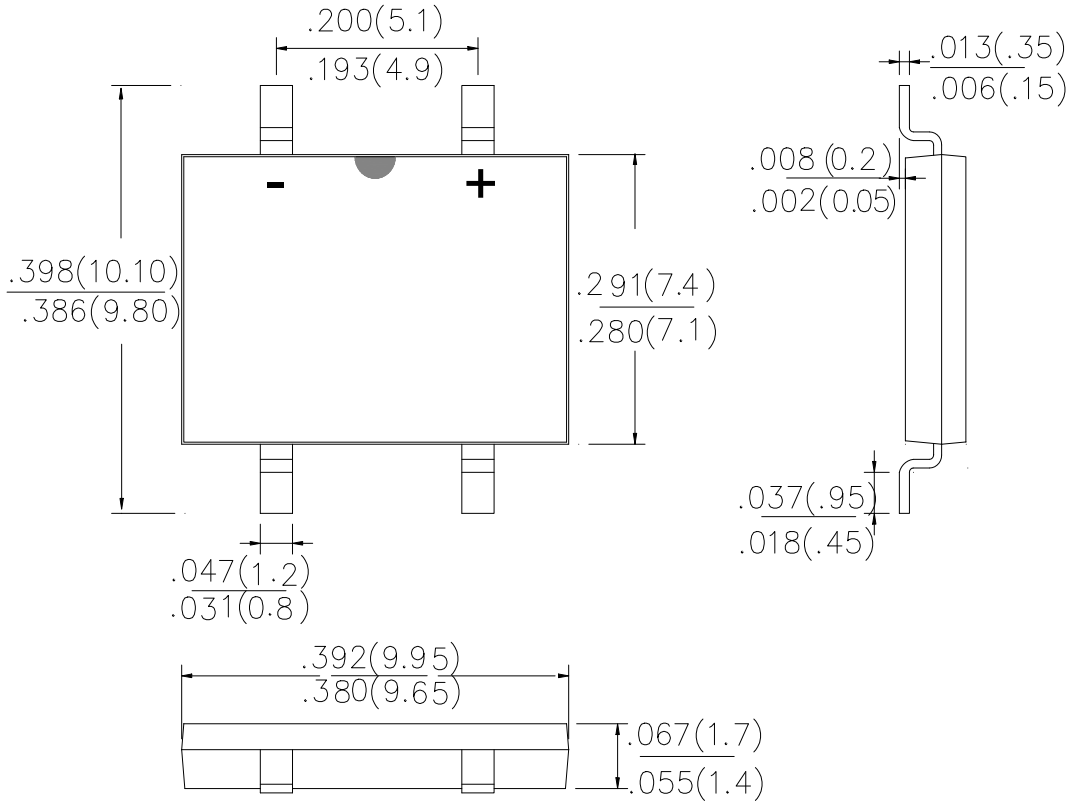


FIG.4:TYPICAL REVERSE CHARACTERISTICS

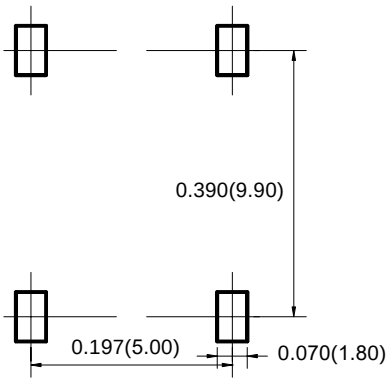


JBSL Package Outline Dimensions



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

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

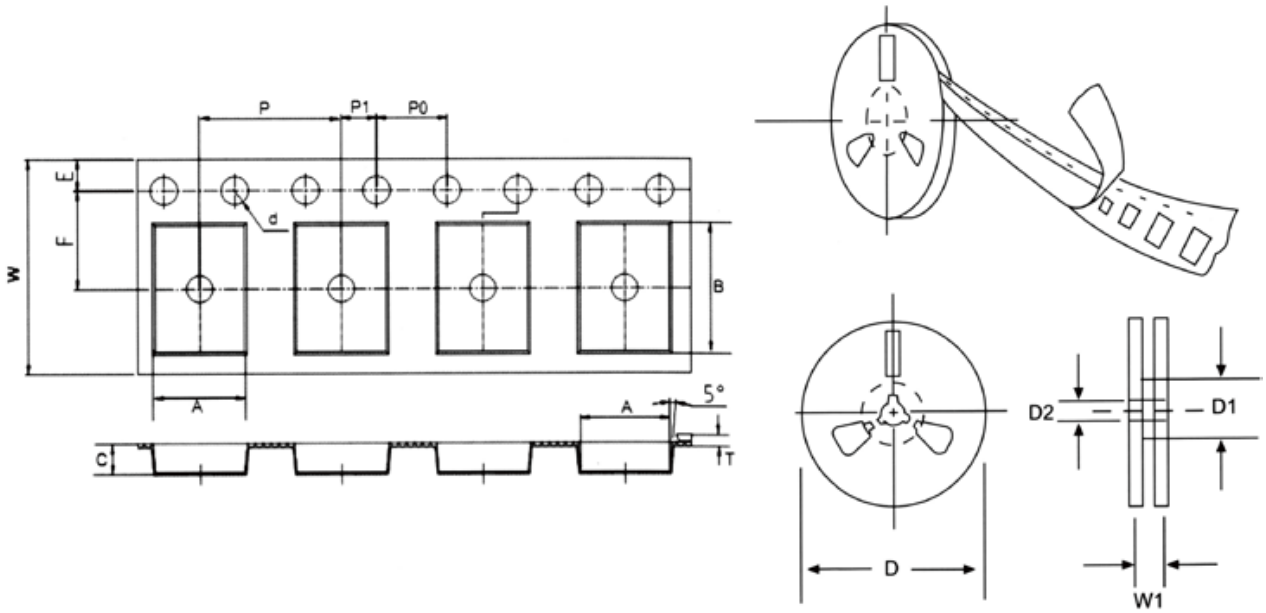


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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.