SEMICONDUCTOR

SS36LB-V

AUTOMOTIVE LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 60 Volts
Forward Current - 3.0Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2015/263/EU
- AEC-Q101 qualified and PPAP capable

RoHS REACH IATF16949认证

AEC-Q101 Qualified

MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003ounce, 0.093 gram

CASE: SMB(DO-214AA)
MARKING:
JF-Logo
W-Work week
M-Work month
Y-Work year
S-Assembly loacation
SS36LB-V: Device code
V: for automible

TYPICAL APPLICATIONS

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

MAXIMUM RATINGS

(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum average forward rectified current (see fig.1)	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	80	A
Operating junction temperature range	T_J	-55 to+150	℃
Storage temperature range	T_{stg}	-55 to+150	℃

ELECTRICAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instaneous forward voltage	IF=3.0A	TJ=25℃	VF 1)	0.48	0.52	V
		TJ=100℃		0.44	-	
		TJ=125℃		0.42	-	
Reverse current	VR=60V	TJ=25℃	IR 2)	60	100	μA
		TJ=100℃		-	10	mA
		TJ=125℃		-	30	
Typical junction capacitance	4V,1MHz		CJ	420		pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2.Pulse test: pulse width≤40ms

THERMAL CHARACTERISTCS

Parameter	Symbol	SMB	Unit
Typical thermal resistance 3)	RθJA	70.0	℃/W
	RθJL	20.0	

3. Unit mounted on PC board with 5.0mm×5.0 mm (0.013 mm thick) copper pads as heat sink

AVAILABALE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Box Size L×W×H (mm)	Quantity (reel/box)	Carton Size L×W×H (mm)	Quantity (box/carton)	Quantity (K/carton)
SS36LB-V-SMB	T/R	Φ330	3000	330×333×39	2	370×370×360	8	48

FIG.1-FORWARD CURRENT DERATING CURVE

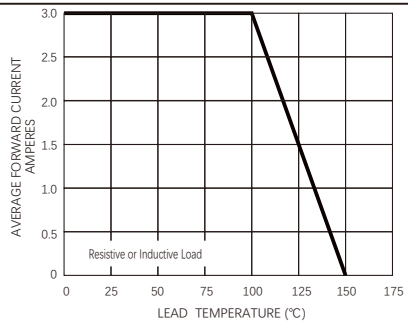


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

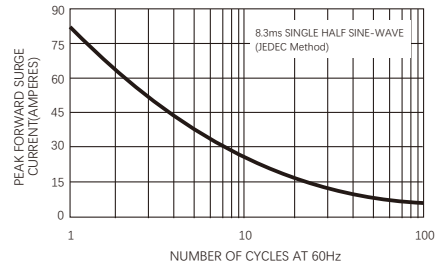


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

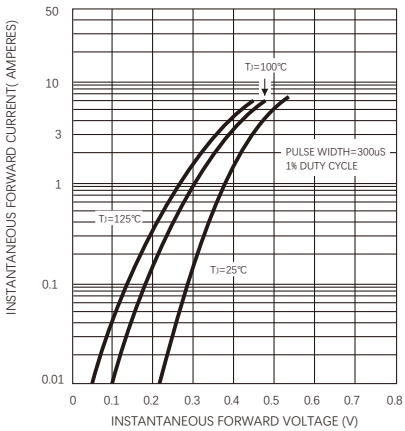


FIG.4-TYPICAL REVERSE CHARACTERISTICS

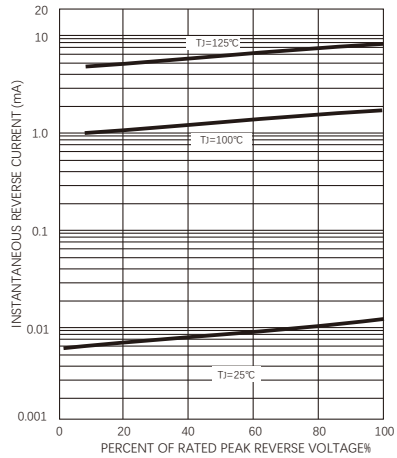
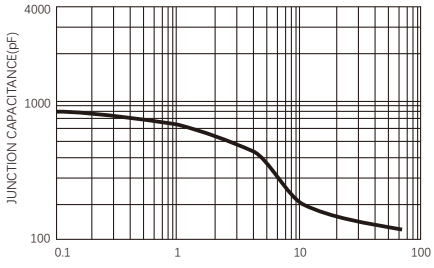
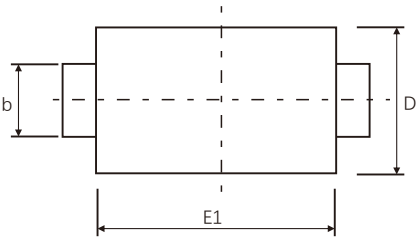
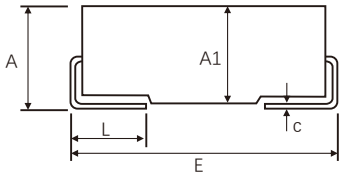


FIG.5-TYPICAL JUNCTION CAPACITANCE



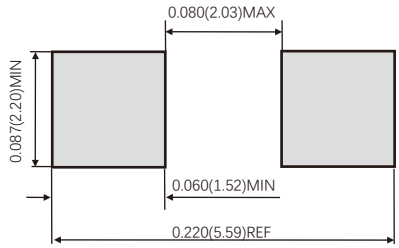
SMB(DO-214AA)





Sym	Value(milimeters)		
	Min	Typ	Max
A	2.13	-	2.44
A1	1.90	-	2.24
b	1.80	-	2.20
c	0.10	-	0.305
D	3.30	-	3.94
E	5.00	-	5.59
E1	4.06	-	4.90
L	0.76	-	1.52

SMB Suggested PAD Layout



Dimensions in inches and (millimeters)

Friendship Reminder

■ JiNan JingHeng （hereinafter referred to as JH） reserves the right to make changes to this document and its products and specifications at anytime without notice.

■ Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

■ JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.

■ JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

■ No license is granted by implication or otherwise under any intellectual property rights of JH.

■ JH’s products are not authorized for use as critical components in life support devices or systems without express written approval of JH.