



HSMB320 thru HSMB3100

Schottky Barrier Rectifiers
(Reverse Voltage 20 to 100V, Forward Current 3A)

Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capabilit

Mechanical Data

- Case: JEDEC DO-214AA(SMB) molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.003 ounce, 0.093 gram

Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load. Derate current by 20%.

Ratings	Symbol	HSMB 320	HSMB 330	HSMB 340	HSMB 350	HSMB 360	HSMB 380	HSMB 3100	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Surge Peak Reverse Voltage	V_{RSM}	14	21	28	35	42	57	71	V
DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Average Forward Rectified Current ($T_A=75^\circ\text{C}$)	I_{FAV}	3							A
Peak Forward Surge Current, 50Hz Half Sine-wave ($T_A=25^\circ\text{C}$)	I_{FSM}	80							A
Repetitive Peak Forward C ($f>15\text{Hz}$)	I_{FRM}	12							A
Instantaneous Forward Voltage	V_F	0.48	0.52	0.7		0.8		V	
Leakage Current ($T_J=25^\circ\text{C}$, $V_R=V_{RRM}$)	I_R	0.1							mA
Leakage Current ($T_J=100^\circ\text{C}$, $V_R=V_{RRM}$)		2							mA
Typical Junction Capacitance	C_J	170							pF
Rating for Fusing, $t<10\text{ms}$ ($T_A=25^\circ\text{C}$)	i^2t	12.5							A^2s
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	50							$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Lead	$R_{\theta JL}$	15							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-65 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$
ESD Protection Voltage	V_{ESD}	>8							KV



DO-214AA(SMB)



DO-214AA(SMB) Dimension

2-Lead DO-214AA(SMB) Plastic
Surface Mounted Package
HSMC Package Code: SMB

Marking:

Product Series
 HSMB320: 32B
 HSMB330: 33B
 HSMB340: 34B
 HSMB350: 35B
 HSMB360: 36B
 HSMB380: 38B
 HSMB3100: 3AB

Cathode band

Note:
Green label is used for pb-free packing

DIM	Min.	Max.
A	1.93	2.08
B	3.48	3.73
C	4.25	4.75
D	1.99	2.31
E	0.90	1.41
F	0.10	0.20
G	5.26	5.46
H	0.15	0.31

Unit: mm

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Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F., No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
Tel: 886-2-25212056 Fax: 886-2-25632712, 25368454
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
Tel: 886-3-5983621~5 Fax: 886-3-5982931