



UH2B - UH2D

SUFACE MOUNT ULTAFAST PLASTIC RECTIFIER DIODES

VOLTAGE RANGE: 100 - 200V

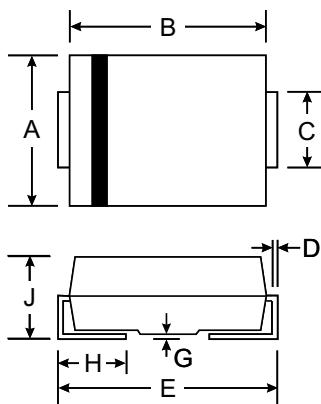
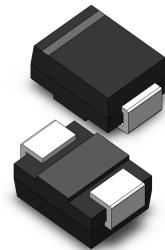
CURRENT: 2.0 A

Features

- Low profile package
- Ideal for automated placement
- Oxide planar chip junction
- Ultrafast recovery times for high frequency

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

All Dimensions in mm

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	UH2B	UH2C	UH2D	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R		100	150	200
RMS Reverse Voltage	$V_R(\text{RMS})$	70	105	105	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	I_O		2.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}		50		A
Forward Voltage @ $I_F = 2.0\text{A}$	V_{FM}		0.69		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I		2.0 50		μA
Reverse Recovery Time (Note 1)	t_{rr}		35		nS
Typical Junction Capacitance (Note 2)	C_J		42		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$		15		$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}		-65 to +150		$^\circ\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$. See figure 5.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

3. Mounted on P.C. Board with 8.0mm² land area.

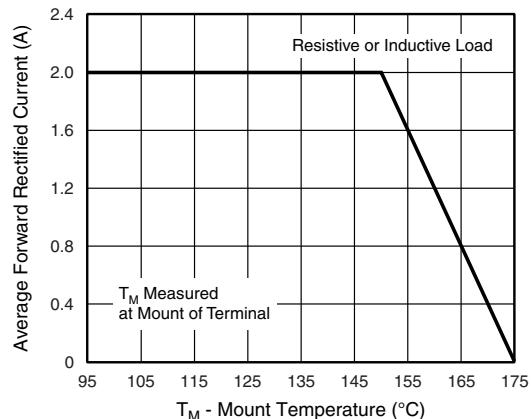
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)


Figure 1. Maximum Forward Current Derating Curve

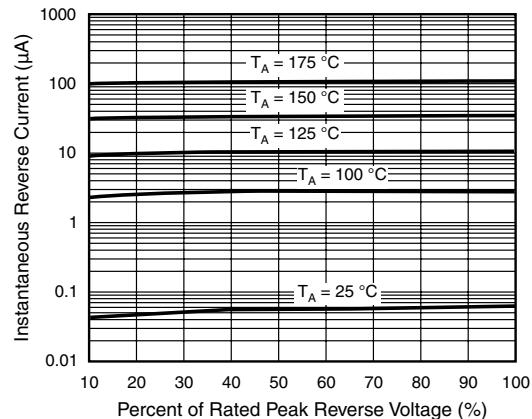


Figure 4. Typical Reverse Characteristics

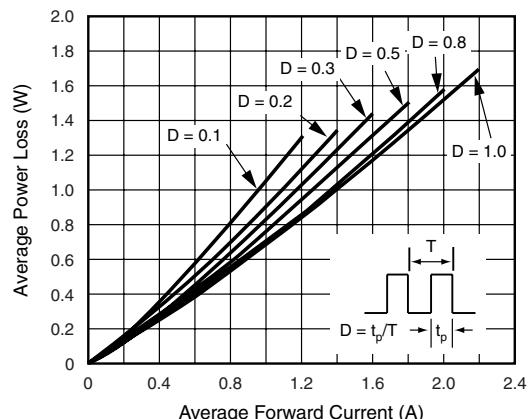


Figure 2. Forward Power Loss Characteristics

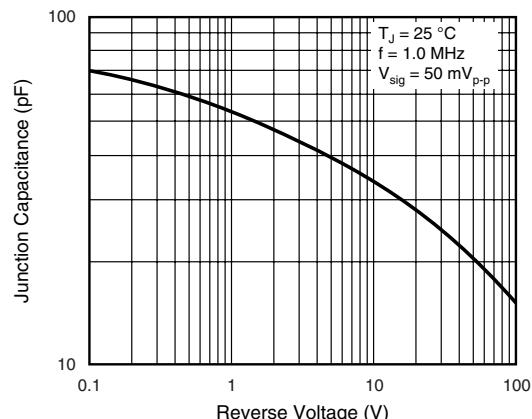


Figure 5. Typical Junction Capacitance

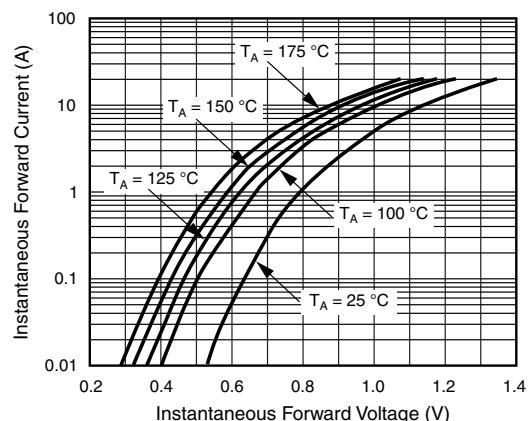


Figure 3. Typical Instantaneous Forward Characteristics

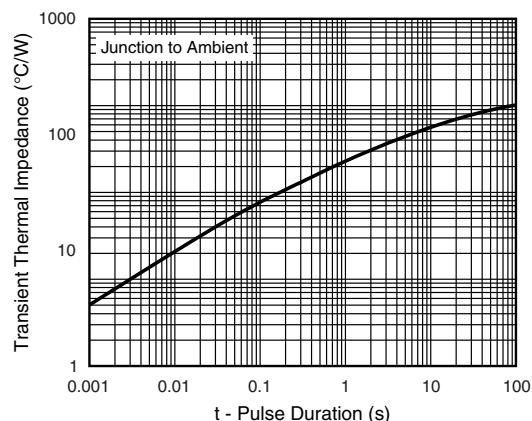


Figure 6. Typical Transient Thermal Impedance