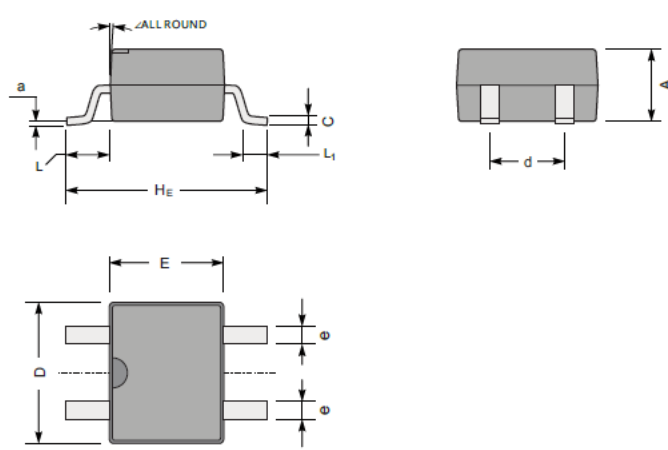


SMD Schottky Bridge

Primary characteristics		
Parameter	Value	Unit
Maximum Repetitive Peak Reverse Voltage	40 ~ 200	V
Maximum Average Forward Rectified Current	1.0	A

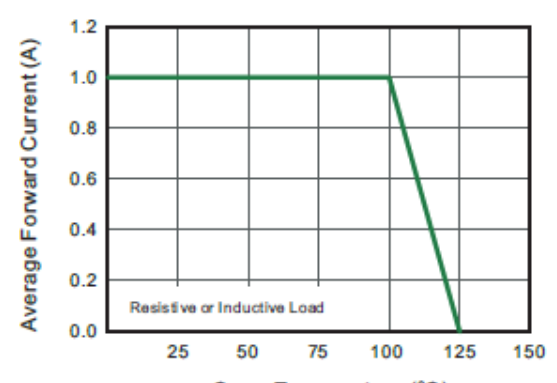
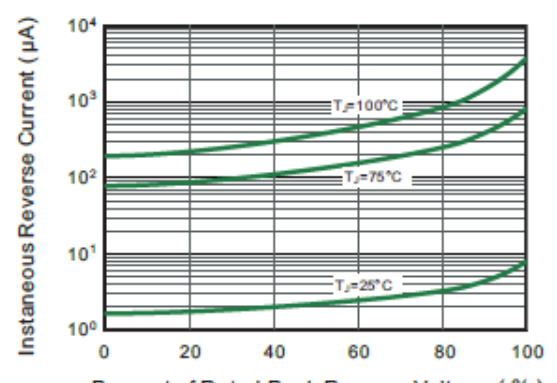
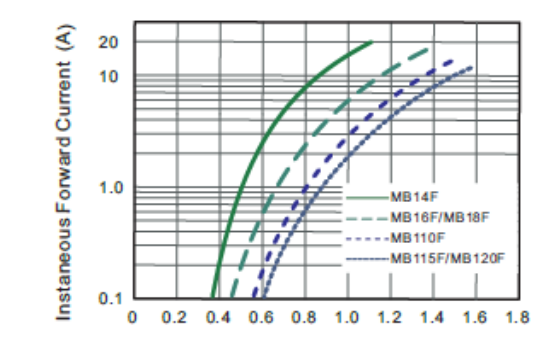
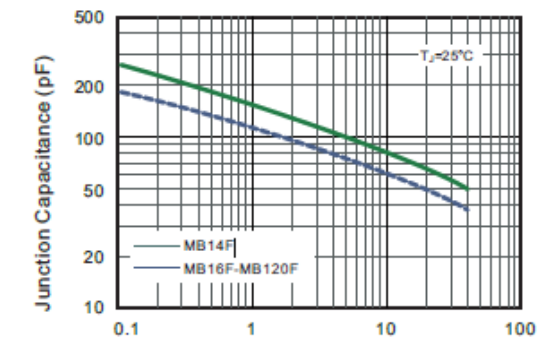
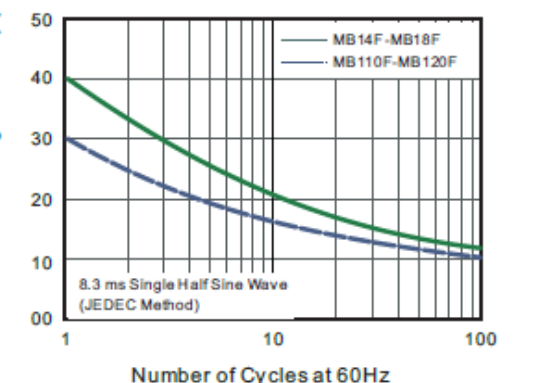
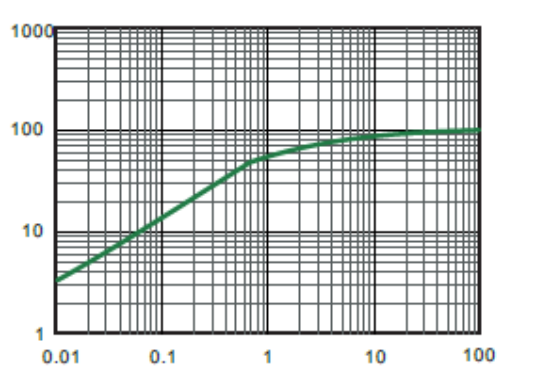
Features

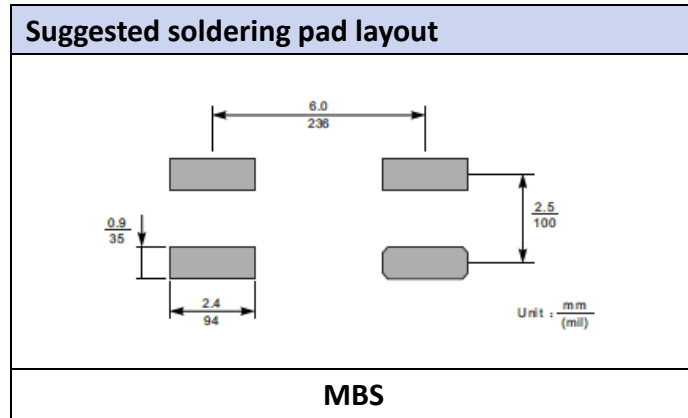
- MBS case for easy automatic insertion
- Pb-free and RoHS compliant
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- Solderable per MIL-STD-750, Method 2026
- Weight: 0.0031oz, 100mg

Case dimensions										
										
MBS										
Unit	A	C	D	E	H _E	d	e	L	L ₁	a
mm	2.6 ±0.4	0.22 ±0.07	5.0 ±0.5	4.1 ±0.5	7.0 ±0.6	2.7 ±0.5	0.7 ±0.3	1.7 ±0.5	1.1 ±0.5	0.20

Absolute maximum ratings and general electrical characteristics (T _a = 25°C)								
Parameter	Symbol	Value					Unit	
		MB14F	MB16F	MB18F	MB110F	MB120F		
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	80	100	200	V	
Maximum RMS voltage	V _{RMS}	28	42	56	70	140		
Maximum DC blocking voltage	V _{DC}	40	60	80	100	200		
Average rectified output current	I _{F(AV)}	1.0					A	
Peak forward surge current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	40		30				
Maximum instantaneous forward voltage @2.0A	V _F	0.55	0.7	0.85	0.90		V	
Maximum DC reverse current at rated DC blocking voltage	I _R	T _a =25°C	0.3		0.2	0.1		μA
		T _a =100°C	10		5	2.0		
Typical junction capacitance ¹⁾	C _j	110	80				pF	
Typical thermal resistance ²⁾	R _{θJA}	100					°C/W	
Operating temperature range	T _j	-55 ~ 125					°C	
Storage temperature range	T _{stg}	-55 ~ 150					°C	

1) Measured at 1.0MHz and applied reverse voltage of 4.0VDC
2) Mounted on glass epoxy PC board with 4x 1.5" x 1.5" (3.81x3.81cm) copper pad

<p>Forward current derating curve</p>  <p>Average Forward Current (A)</p> <p>Case Temperature (°C)</p> <p>Resistive or Inductive Load</p>	<p>Typical reverse characteristics</p>  <p>Instantaneous Reverse Current (µA)</p> <p>Percent of Rated Peak Reverse Voltage (%)</p> <p>$T_j = 100^\circ\text{C}$</p> <p>$T_j = 75^\circ\text{C}$</p> <p>$T_j = 25^\circ\text{C}$</p>
<p>Typical forward characteristic</p>  <p>Instantaneous Forward Current (A)</p> <p>Instantaneous Forward Voltage (V)</p> <p>MB14F</p> <p>MB16F/MB18F</p> <p>MB110F</p> <p>MB115F/MB120F</p>	<p>Typical junction capacitance</p>  <p>Junction Capacitance (pF)</p> <p>Reverse Voltage (V)</p> <p>$T_j = 25^\circ\text{C}$</p> <p>MB14F</p> <p>MB16F-MB120F</p>
<p>Maximum non-repetitive peak forward surge current</p>	<p>Typical transient thermal impedance</p>
 <p>Peak Forward Surge Current (A)</p> <p>Number of Cycles at 60Hz</p> <p>8.3 ms Single Half Sine Wave (JEDEC Method)</p> <p>MB14F-MB18F</p> <p>MB110F-MB120F</p>	 <p>Transient Thermal Impedance (°C/W)</p> <p>t, Pulse Duration (sec)</p>



Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
MB14S ~ MB120S	MBS	3000 pcs / 13" reel	---

Disclaimer

Akyga semi reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Akyga semi or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on Akyga semi data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Akyga semi does not assume any liability arising out of the application or use of any product or circuit. Akyga semi products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Akyga semi. Customers using or selling Akyga semi components for use in such applications do so at their own risk and shall agree to fully indemnify Akyga semi and its subsidiaries harmless against all claims, damages and expenditures.