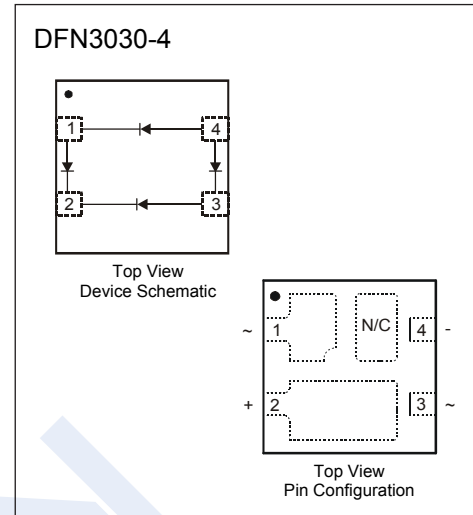


## Bridge Rectifiers

### SBR05M100BLP

#### ■ Features

- Ultra Low Leakage Current
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability
- 150°C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant, "Green" Device



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>RM</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	
Average Rectified Output Currents	I <sub>o</sub>	500	mA
Non-Repetitive Peak Forward Surge Current @ 8.3ms	I <sub>FSM</sub>	8	A
Power Dissipation	P <sub>d</sub>	560	mW
Thermal Resistance Junction to Ambient (Note.1) (Note.2)	R <sub>θJA</sub>	222 149	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

Note.1: FR-4 PCB, 2 oz. Copper, minimum recommended pad layout per

Note.2: Polyimide PCB, 2 oz. copper; minimum recommended pad layout per

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 250 uA	100			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 0.25 A, T <sub>J</sub> =25°C			0.6	
		I <sub>F</sub> = 0.5 A, T <sub>J</sub> =25°C			0.73	
		I <sub>F</sub> = 0.5 A, T <sub>J</sub> =125°C			0.63	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 100 V, T <sub>J</sub> =25°C			25	uA
		V <sub>R</sub> = 100 V, T <sub>J</sub> =125°C			250	

#### ■ Marking

Marking	** DA
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# Bridge Rectifiers

## SBR05M100BLP

■ Typical Characteristics

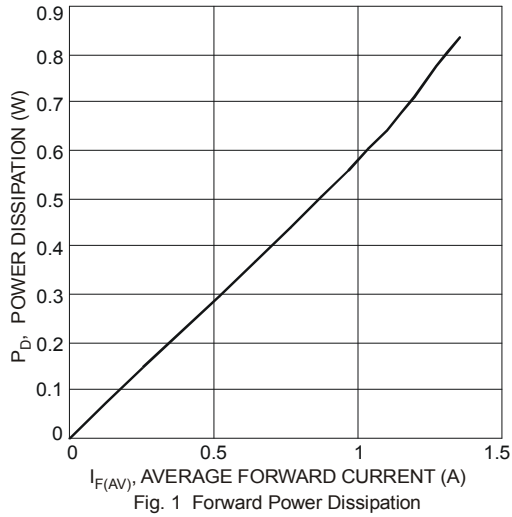


Fig. 1 Forward Power Dissipation

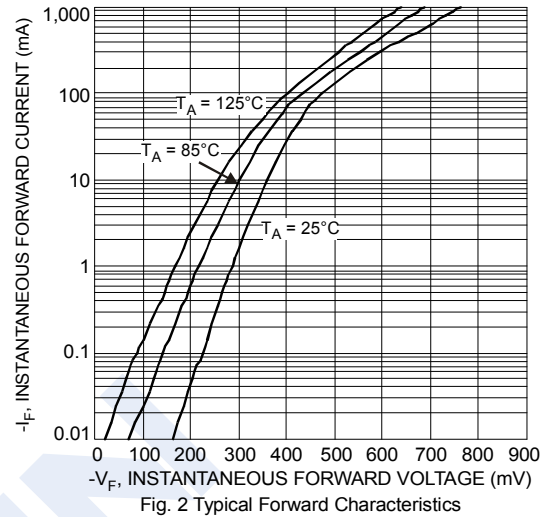


Fig. 2 Typical Forward Characteristics

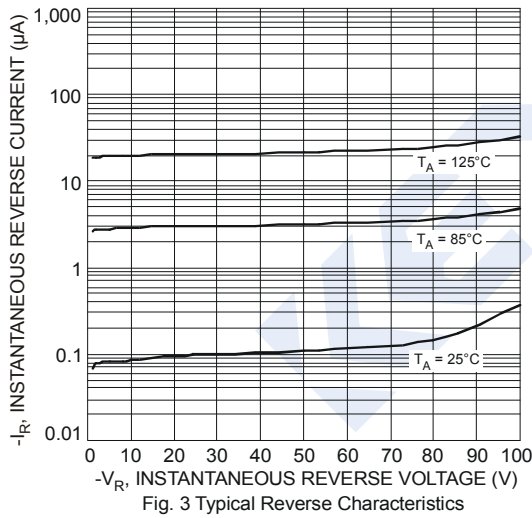


Fig. 3 Typical Reverse Characteristics

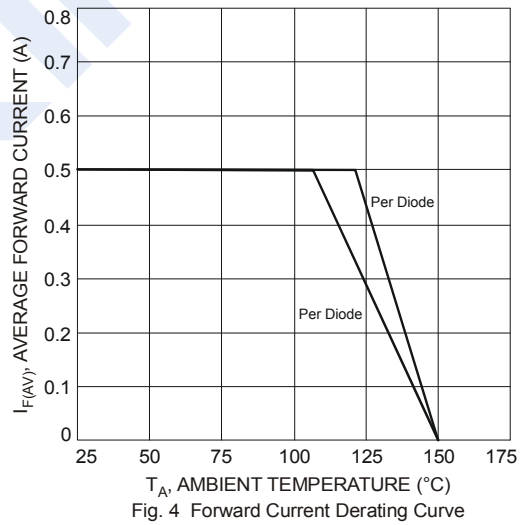


Fig. 4 Forward Current Derating Curve

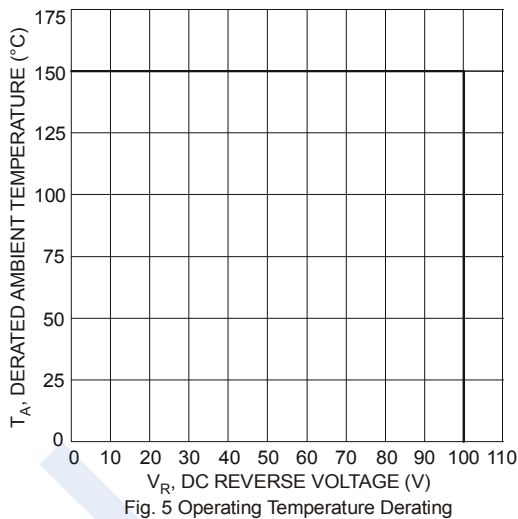
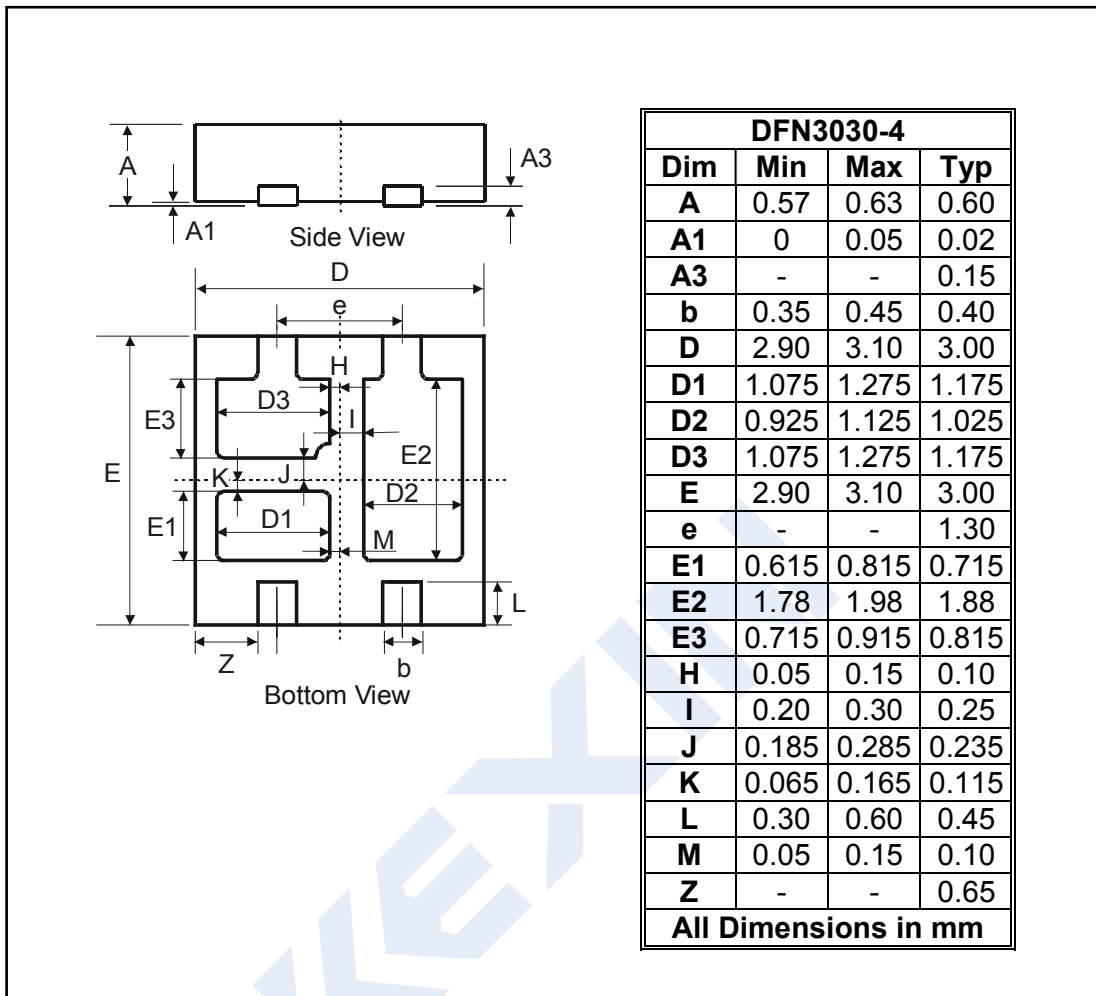


Fig. 5 Operating Temperature Derating

Package Outline Dimensions

DFN3030-4



Suggested Pad Layout

