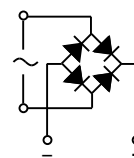
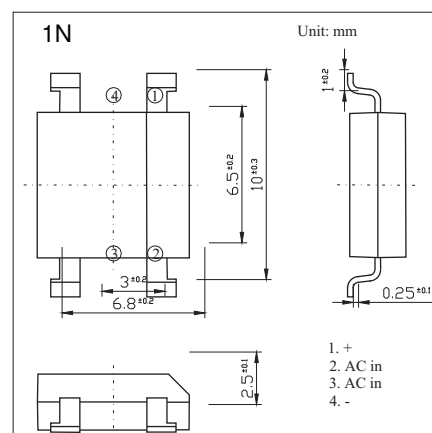


Surface Mount Glass Passivated Bridge Rectifiers

S1NB05 - S1NB100

Features

- Glass passivated chip junctions
- Surge overload rating to 30 Amps peak
- Reliable low cost molded plastic construction
- Ideal for printed circuit board applications



Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	S1NB05	S1NB10	S1NB20	S1NB40	S1NB60	S1NB80	S1NB100	Unit
Peak Repetitive Reverse Voltage	V_{RMM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Forward Rectified Current $T_A = 40^\circ\text{C}$	I_o	1.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half-sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Forward Voltage (per element) @ $I_F = 1.0\text{A}$	V_F	1.05							V
Reverse Current(per element) @ Rated V_R , $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	5 500							μA
Minimum Insulation Breakdown Voltage (Circuit to Case)	V_{ISO}	2400							V
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150							$^\circ\text{C}$

Notes: 1. Device mounted on PCB with 0.5×0.5 " ($13 \times 13\text{mm}$).

S1NB05 - S1NB100

■ Typical Characteristics

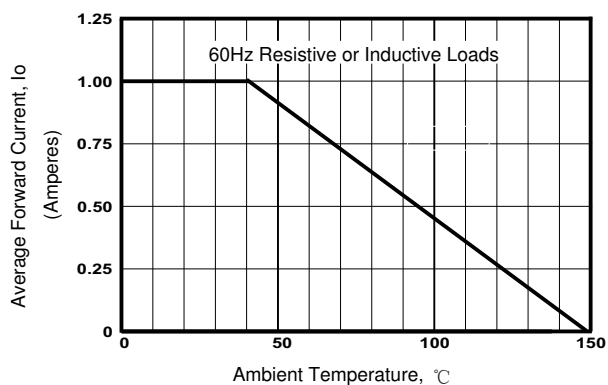


FIGURE 1. FORWARD CURRENT DERATING CURVE

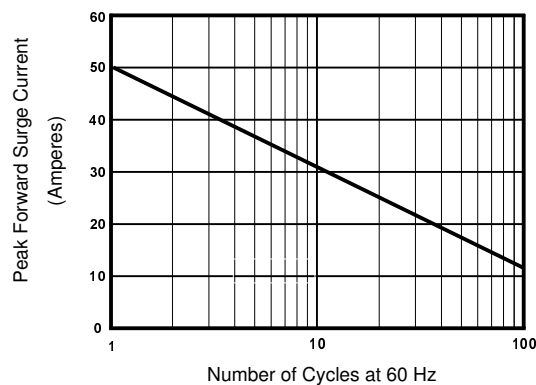


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

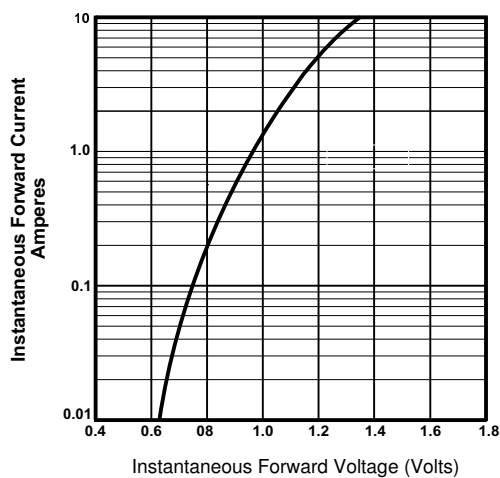


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

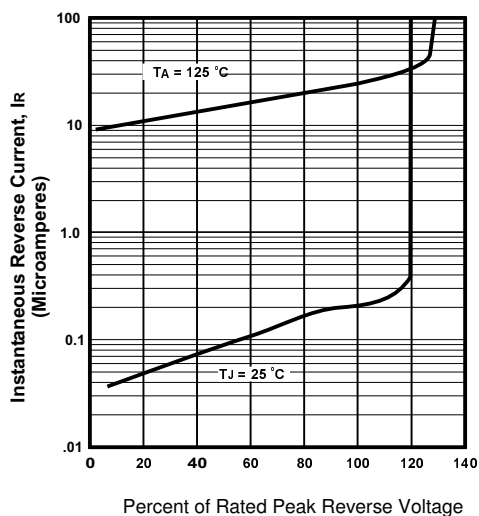


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

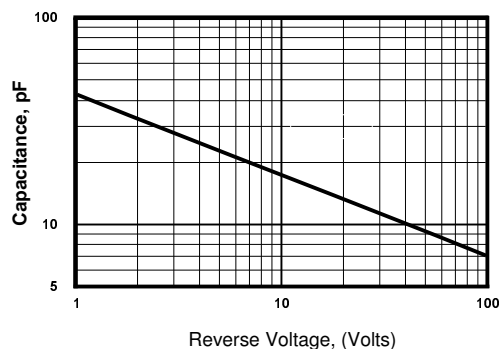


FIGURE 5. TYPICAL JUNCTION CAPACITANCE PER DIODE