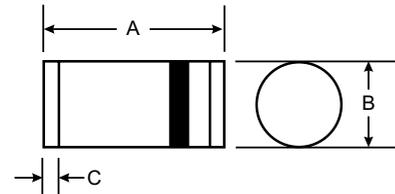


**VOLTAGE RANGE: 20 - 60V**  
**CURRENT: 1.0 A**

### Features

- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability



### Mechanical Data

- Case : DO-213AB/LL41, Plastic
- Polarity : Color band
- Approx Weight : 0.25 grams
- Mounting Position : Any



LL41/ DO-213AB		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	BYM13-20	BYM13-30	BYM13-40	BYM13-50	BYM13-60	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 75°C	I <sub>(AV)</sub>	1.0					A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I	30					A
Maximum Instantaneous Forward Voltage at 1.0A	V <sub>F</sub>	0.50		0.70			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>A</sub> = 25°C @ T <sub>A</sub> = 100°C	I <sub>R</sub>	0.5			10		mA
Maximum Full Load Reverse Current Full Cycle Average @ T <sub>A</sub> = 75°C	I <sub>R</sub>	5					mA
Voltage rate of change (rated V <sub>R</sub> )	dV/dt	10 000					V/μs
Maximum Thermal Resistance (See Note 1)	R <sub>θJL</sub>	75					°C/W
Typical Junction Capacitance (See Note 2)	C <sub>J</sub>	110					pF
Operating Temperature Range	T <sub>J</sub>	-65 to +125					°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

Notes: 1. Thermal resistance from junction to lead.  
 2. Measured at 1.0MHz and applies reverse voltage of 4.0V.



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

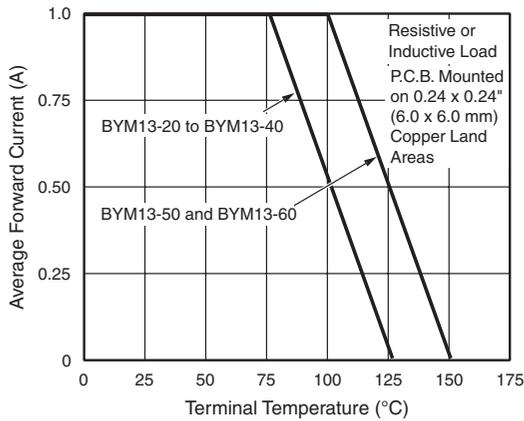


Figure 1. Forward Current Derating Curve

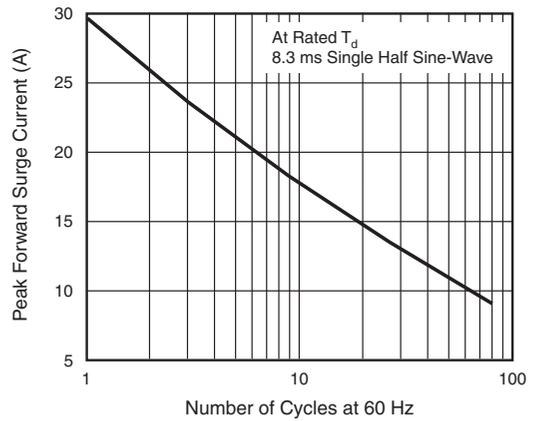


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

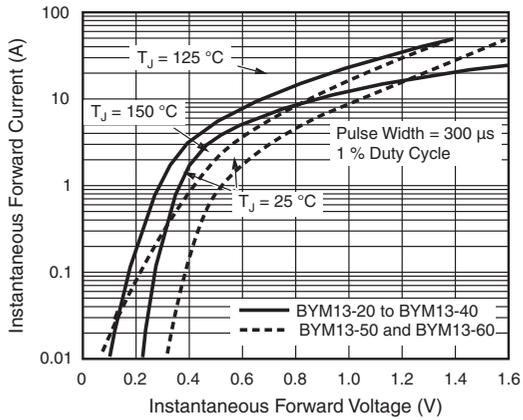


Figure 3. Typical Instantaneous Forward Characteristics

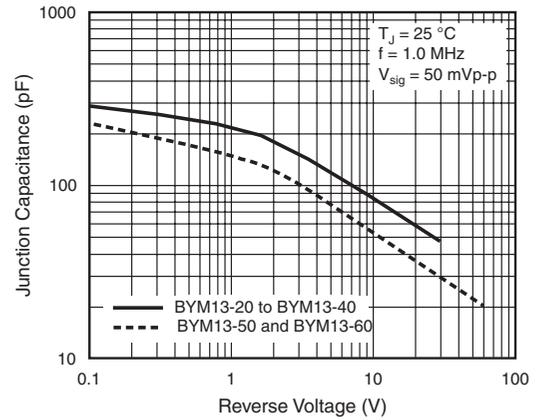


Figure 5. Typical Junction Capacitance

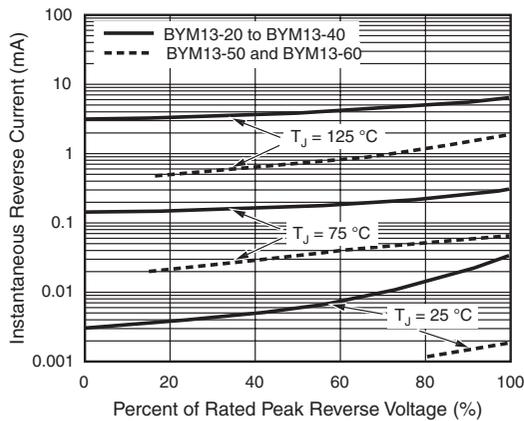


Figure 4. Typical Reverse Characteristics