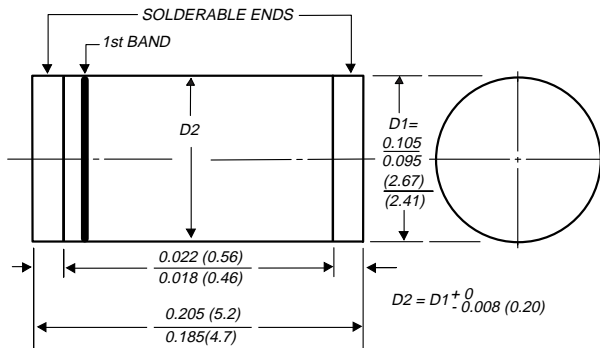


# BYM13-20 THRU BYM13-60 SGL41-20 THRU SGL41-60

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 60 Volts      Forward Current - 1.0 Ampere

### DO-213AB



1st band denotes type and positive end (cathode)

Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has carries Underwriters Laboratory Flammability Classifications 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ High surge capability
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- ◆ Guardring for overvoltage protection
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-213AB molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Two bands indicate cathode end 1st band denotes device type 2nd band denotes voltage type

**Mounting Position:** Any

**Weight:** 0.116 gram, 0.0041 ounce

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	BYM13					UNITS
		-20	-30	-40	-50	-60	
Denotes Schottky devices: 1st band is orange		SGL41-20	SGL41-30	SGL41-40	SGL41-50	SGL41-60	
Polarity color bands (2nd band) voltage type		Gray	Red	Orange	Yellow	Green	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	Volts
Maximum average forward rectified current (SEE FIG. 1)	I <sub>(AV)</sub>	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30.0					Amps
Maximum instantaneous forward voltage at 1.0A (NOTE 1)	V <sub>F</sub>	0.50		0.70			Volts
Maximum reverse current at rated DC blocking voltage (NOTE 1)	I <sub>R</sub>	0.5			5.0		mA
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	110			80.0		pF
Maximum thermal resistance (NOTE 4) (NOTE 3)	R <sub>θJA</sub> R <sub>θJT</sub>	75.0 30.0					°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +125			-55 to +150		°C
Storage temperature range	T <sub>STG</sub>	-55 to +150					°C

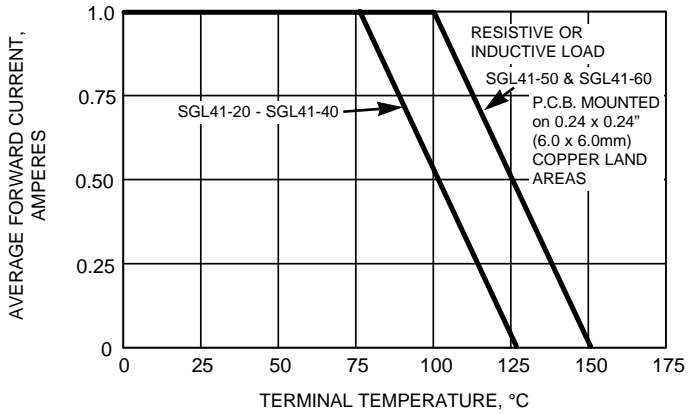
#### NOTES:

- (1) Pulse test: 300µs pulse width, 1% duty cycle
- (2) Measured at 1 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance junction to terminal, 0.24 x 0.24" (6.0 x 6.0mm) copper pads to each terminal
- (4) Thermal resistance junction to ambient, 0.24 x 0.24" (6.0 x 6.0mm) copper

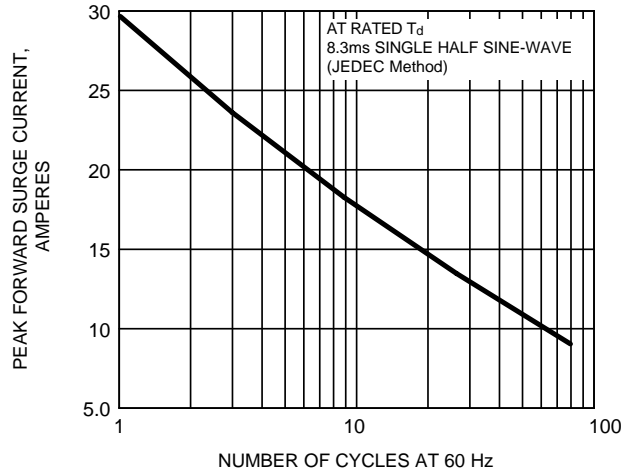


**RATINGS AND CHARACTERISTIC CURVES BYM13-20 THRU BYM13-60, SGL41-20 THRU SGL41-60**

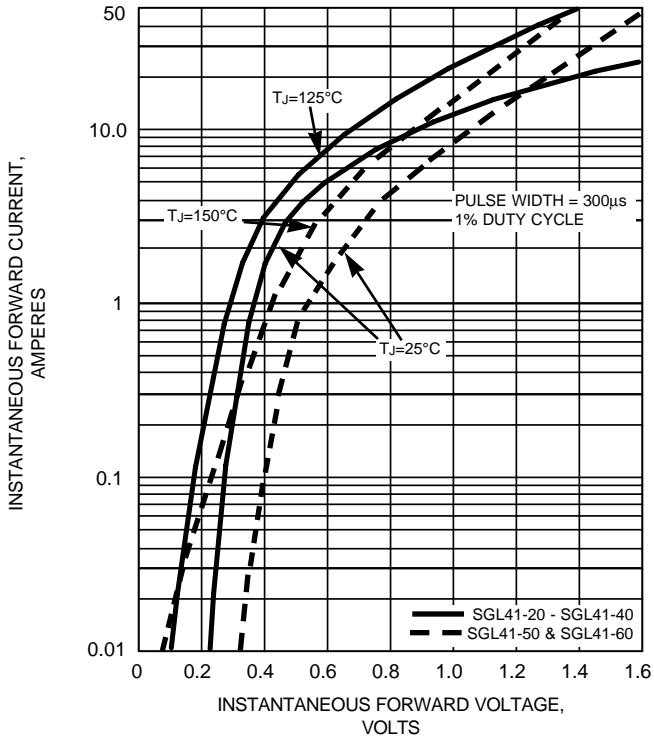
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



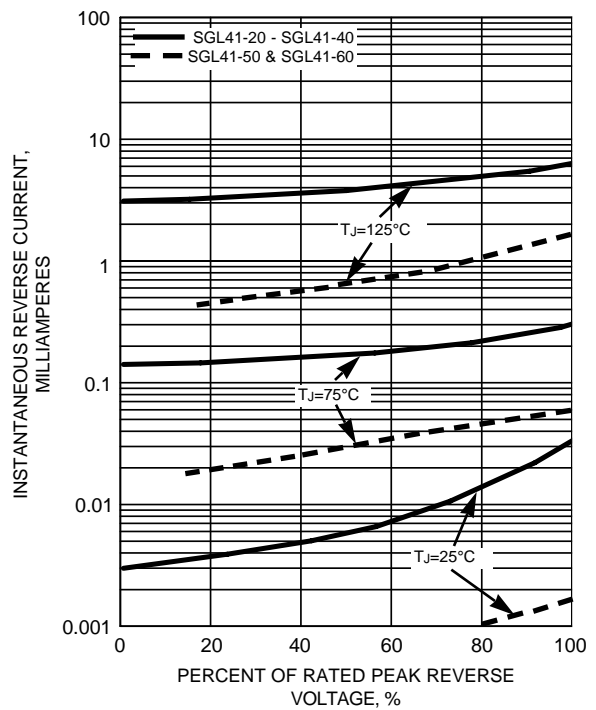
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



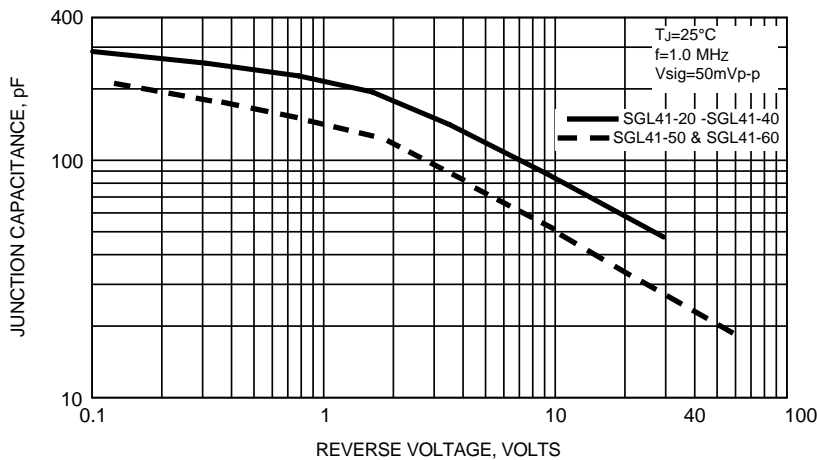
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



单击下面可查看定价，库存，交付和生命周期等信息

[>>Vishay\(威世\)](#)