



# WEET Technology Company Limited

## Schottky Barrier Rectifiers

**SB120 THRU SB1100**

**VOLTAGE RANGE**

**20 to 100 Volts**

**CURRENT**

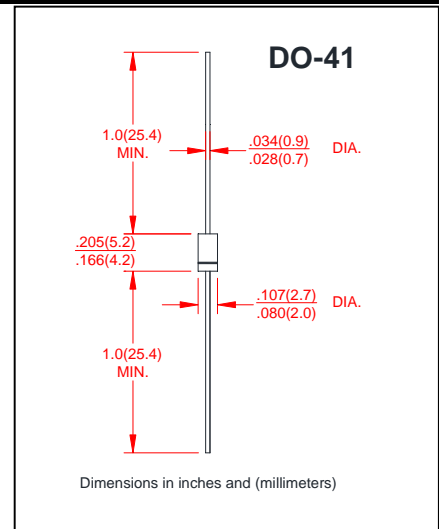
**1.0 Ampere**

### FEATURES

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering guaranteed  
260°C/10 seconds, 0.375" (9.5mm) lead length at 5 lbs (2.3kg) tension

### MECHANICAL DATA

- Case: Mold plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Indicated by cathode band
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	SB120	SB130	SB140	SB150	SB160	SB180	SB1100	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	0.50		0.70		0.85		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	0.5							mA
	$T_A = 100^\circ\text{C}$	10							
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	50							°C/W
Operating Temperature Range	$T_J$	-55 to +125							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

**Notes:**

1. Thermal Resistance from Junction to Ambient at  $5.0 \times 5.0 \text{mm}^2$  copper pad areas.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

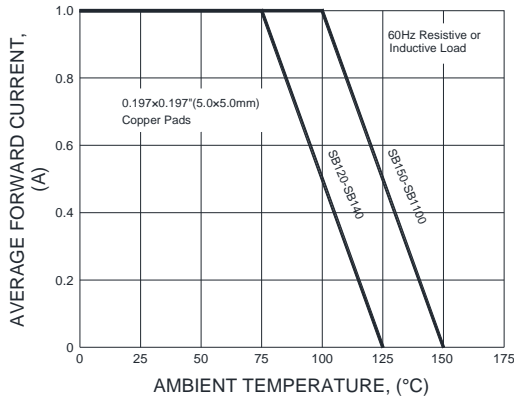


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

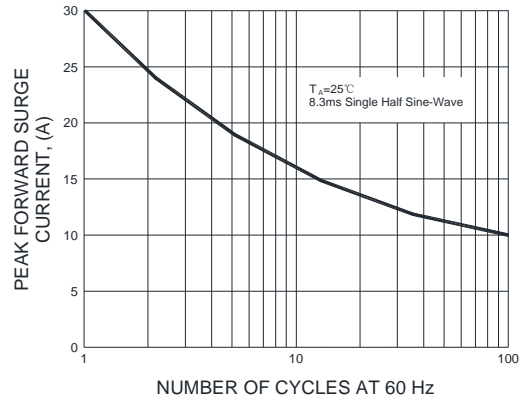


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

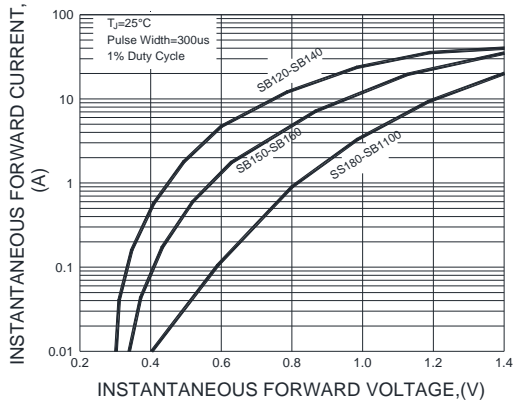
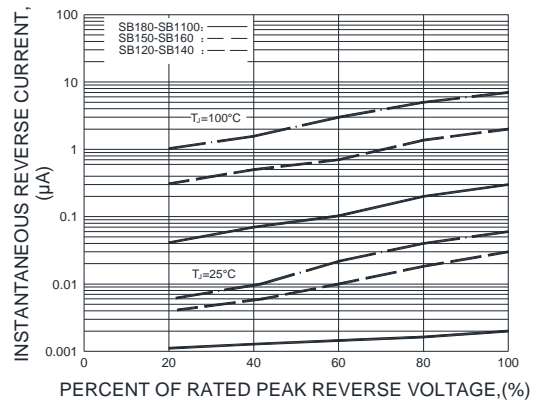


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.