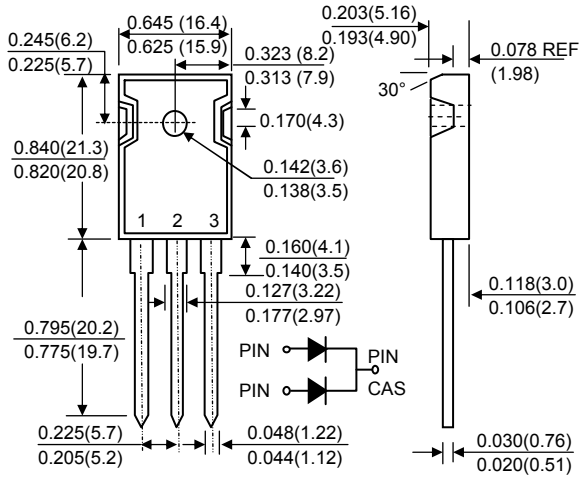
# SBL2030PT ~ SBL2040PT

# DUAL SCHOTTKY BARRIER RECTIFIERS

## PRV : 30 ~ 40 Volts
## Io : 20 Amperes

### TO-247AD (TO-3P)




**Dimensions in inches and ( millimeters )**

### FEATURES :

* Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
* Dual rectifier construction, positive center tap
* Metal silicon junction, majority carrier conduction
* Low power loss, high efficiency
* High curent capability, low forward voltage drop
* High surge capability
* Guardring for overvoltage protection
* For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
* Pb / RoHS Free

### MECHANICAL DATA :

* Case : TO-247AD Molded plastic
* Polarity : As marked on the body
* Mounting position : Any
* Weight : 5.6 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | SBL2030PT | SBL2040PT | UNIT |
|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 30 | 40 | V |
| Maximum Working Peak Reverse Voltage | $V_{RWM}$ | 21 | 28 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 30 | 40 | V |
| Maximum Average Forward Rectified Current at $T_C$ = 100 °C | $I_{F(AV)}$ | 20 | | A |
| Peak Forward Surg Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg | $I_{FSM}$ | 250 | | A |
| Maximum Instantaneous Forward Voltage at 10A (Note 1) | $V_F$ | 0.6 | | V |
| Maximum Instantaneous Reverse Current $T_C$ = 25 °C | $I_R$ | 1.0 | | mA |
| Per leg at Rate DC Blocking Voltage (Note 1) $T_C$ = 100 °C | | 50 | | |
| Typical Thermal Resistance (Junction to Case) Per Leg | $R_{\theta JC}$ | 1.5 | | °C/W |
| Operating Junction and Storage Temperature Range | $T_J$, $T_{STG}$ | -40 to + 125 | | °C |

**Note :**

(1) Pulse test : 300 μs pluse width, 1% duty cycle

## RATING AND CHARACTERISTIC CURVES ( SBL2030PT ~ SBL2040PT )

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

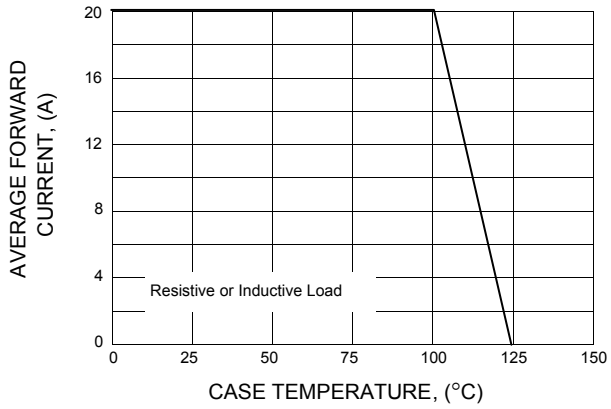



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**

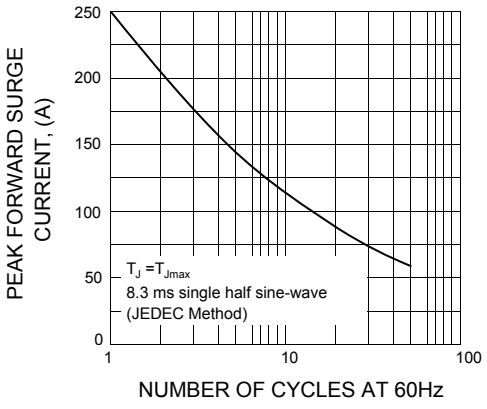



**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG**

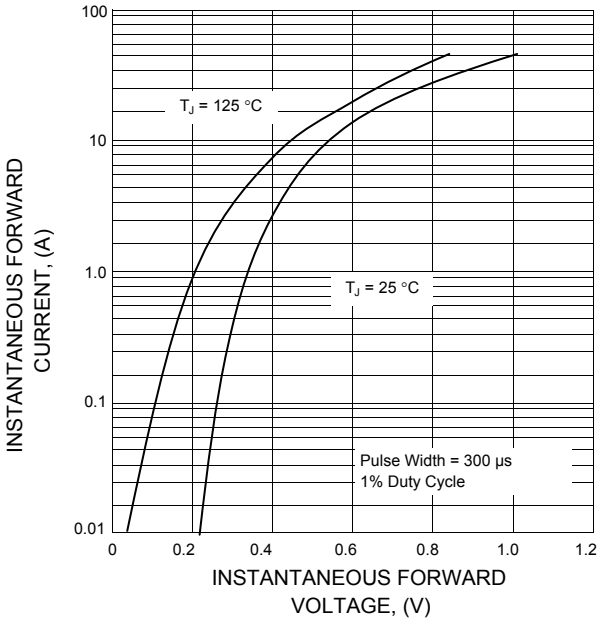



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**