

## Schottky Barrier Rectifier

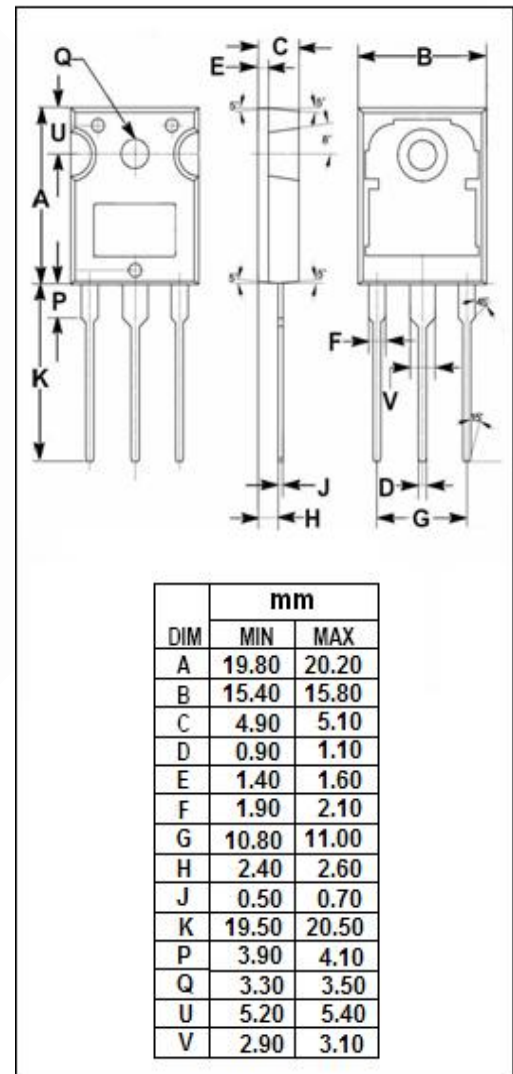
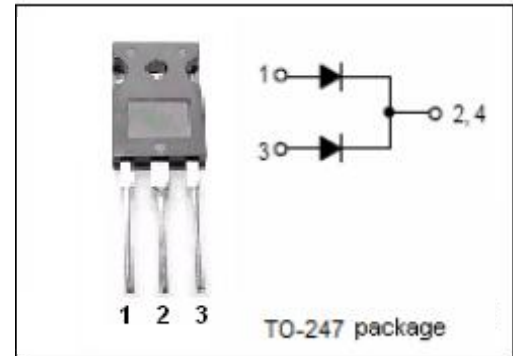
## SBL6040PT

### FEATURES

- With TO-247 packaging
- Low leakage current, low power loss, high efficiency
- High frequency operation
- High surge capability
- Low stored charge majority carrier conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Switching power supply
- High frequency inverters
- Freewheeling diodes
- Reverse battery protection
- Polarity protection applications



### ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$ $V_{RMS}$ $V_R$	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	40	V
$I_{F(AV)}$	Average Rectified Forward Current@ $T_c=150^{\circ}\text{C}$	60	A
$I_{FSM}$	Nonrepetitive Peak Surge Current (8.3ms single half sine-wave superimposed on rated load conditions) $t_p=10\text{ms}$	500	A
$T_J$	Junction Temperature	-65~150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^{\circ}\text{C}$

**Schottky Barrier Rectifier****SBL6040PT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.5	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=30; T_j=25^{\circ}C$	0.55	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=$ rated $V_{RRM}; T_j=25^{\circ}C$	20	mA
		$V_R=$ rated $V_{RRM}; T_j=100^{\circ}C$	200	