

SCHOTTKY BARRIER RECTIFIERS

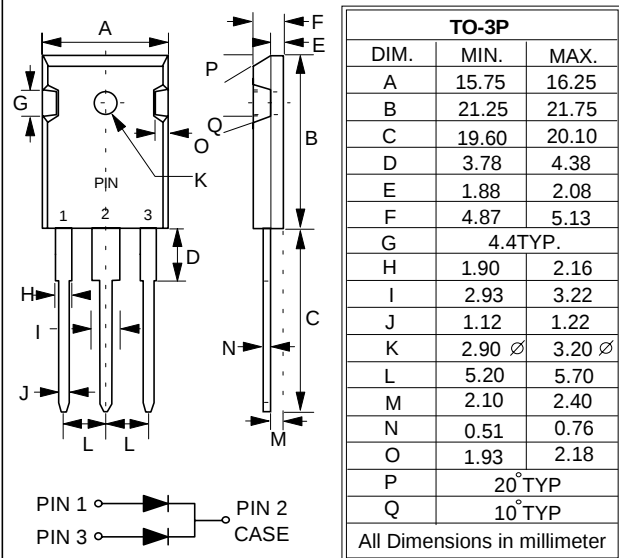
REVERSE VOLTAGE - 30 to 60 Volts
FORWARD CURRENT - 20 Amperes

FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case : TO-3P molded plastic
- Polarity : As marked on the body
- Weight : 0.2 ounces, 5.6 grams
- Mounting position : Any

TO-3P

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%

CHARACTERISTICS	SYMBOL	SBL 2030PT	SBL 2035PT	SBL 2040PT	SBL 2045PT	SBL 2050PT	SBL 2060PT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	V
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current @TC=95°C	I(AV)	20						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I _{FSM}	250						A
Maximum forward Voltage at 10A DC (Note 1)	V _F	0.55				0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	1 50						mA
Typical Junction Capacitance per element (Note2)	C _J	600						pF
Typical Thermal Resistance (Note 3)	R _{θJC}	2.5						°C/W
Operating Temperature Range	T _J	-55 to +125						°C
Storage Temperature Range	T _{STG}	-55 to +150						°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0VDC.
3. Thermal Resistance Junction to Case.

REV. 2, 01-Dec-2000, KTHD03

