



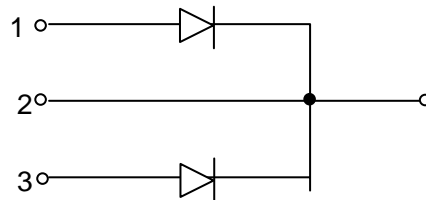
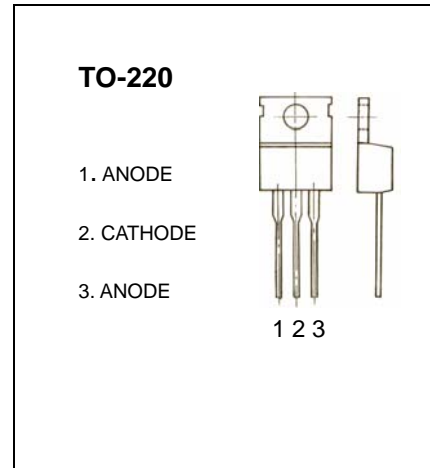
TO-220 Plastic-Encapsulate Transistors

SBL2030CT-SBL2060CT

SCHOTTKY BARRIER RECTIFIER

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Characteristic	Symbol	SBL 2030CT	SBL 2035CT	SBL 2040CT	SBL 2050CT	SBL 2060CT	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	30	35	40	50	60	V	
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{R(RMS)}	21	24.5	28	35	42	V	
Average Rectified Output Current @ T _C =95°C (Note 1)	I _O	20						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250						A
Forward Voltage Drop @ I _F =10A, T _C =25°C	V _{FM}	0.55			0.75		V	
Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C =100°C	I _R	1.0			50		mA	
Typical Junction Capacitance (Note 2)	C _j	650					pF	
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150					°C	

Notes: 1. Thermal resistance junction to case mounted heat sink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Typical Characteristics

SBL2030-2060CT

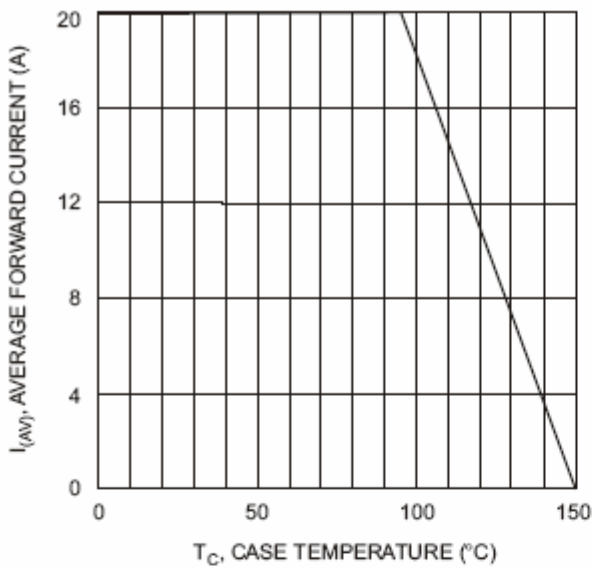


Fig. 1 Forward Current Derating Curve

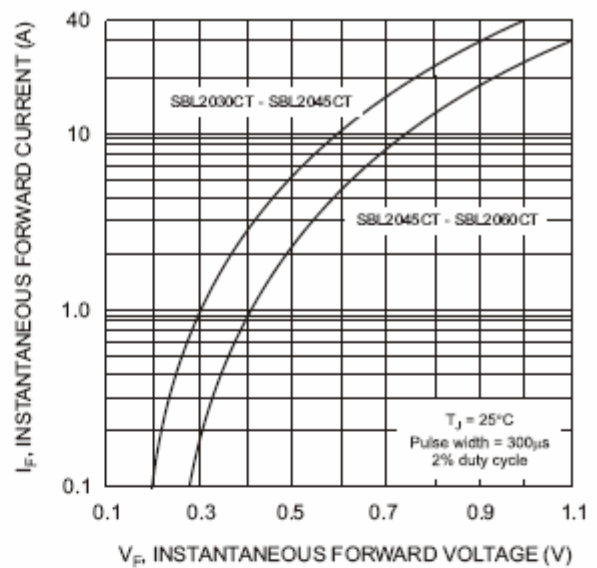


Fig. 2 Typical Forward Voltage

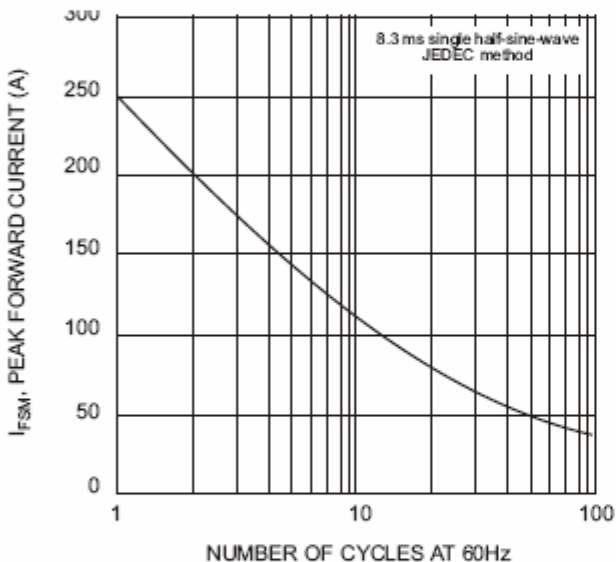


Fig. 3 Maximum Non-Repetitive Surge Current

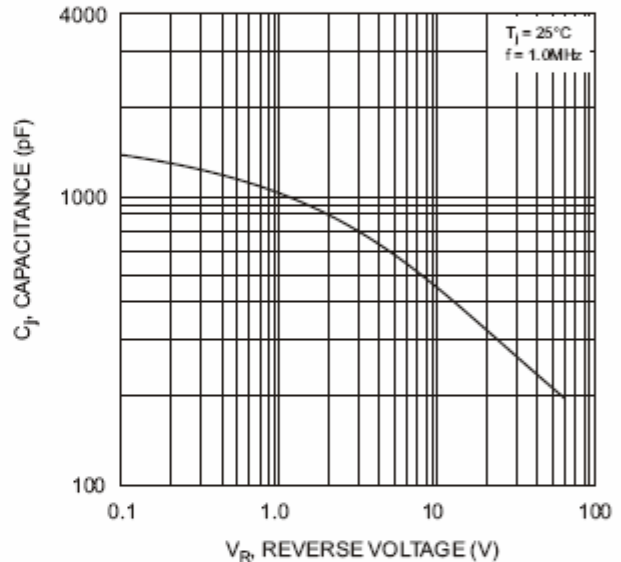


Fig. 4 Typical Junction Capacitance

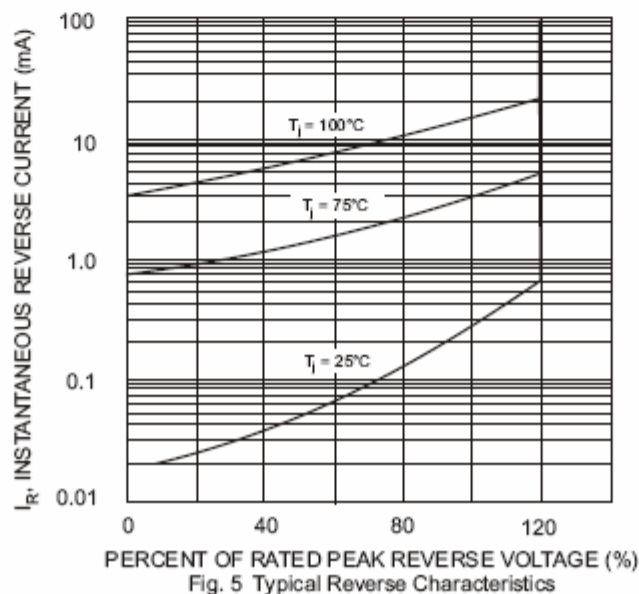


Fig. 5 Typical Reverse Characteristics