



LOW FORWARD VOLTAGE SCHOTTKY BARRIER RECTIFIER

SRBL2030C THRU SRBL2060C

VOLTAGE RANGE

30 to 60 Volts

CURRENT

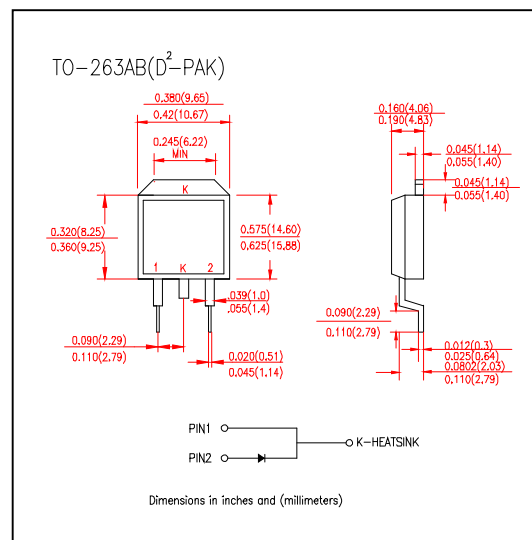
20.0 Ampere

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High efficiency
- High Surge Capability
- High Current capacity and Low Forward Voltage Drop
- For use in low voltage high frequency inverters, Free wheeling, and polarity protection applications
- Plastic Material has UL Flammability Classification 94V-0

MECHANICAL DATA

- Case: D²-PAK molded plastic
- Terminals: Plated Lead solderable per MIL-STD-202 Method 208
- Polarity: As Marked on Body
- Weight: 1.9 grams (approx)
- Mounting Position: Any
- Marking: Type Number



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		SYMBOLS	SRBL 2030C	SRBL 2035C	SRBL 2040C	SRBL 2045C	SRBL 2050C	SRBL 2060C	UNIT
Peak Repetitive Reverse Voltage		V _{RRM}	30	35	40	45	50	60	V
Working Peak Reverse Voltage		V _{RWM}							
DC Blocking Voltage		V _R							
RMS Reverse Voltage		V _{R(RMS)}	21	25	28	32	35	42	V
Average Rectified Output Current (Note 1)@T _C =95℃		I _O	20.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)		I _{FSM}	175						A
Forward Voltage Drop @I _F =10A,T _C =25℃		V _{FM}	0.55				0.75		V
Peak Reverse Current at Rated DC Blocking Voltage	T _C = 25℃	I _{RM}	1.0						mA
	T _C = 100℃		50						
Typical Junction Capacitance(Note2)		C _j	650						pF
Typical Resistance Junction to case(Note1)		R _{θJC}	2.8						℃/W
Operating and Storage Temperature Range		T _J T _{STG}	(-55 to +150)						℃

Notes:

1. Thermal Resistance Junction to case mounted on heatsink
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC



LOW FORWARD VOLTAGE SCHOTTKY BARRIER RECTIFIER

SRBL2030C THRU SRBL2060C

VOLTAGE RANGE 30 to 60 Volts
CURRENT 20.0 Ampere

RATINGE AND CHARACTERISTIC CURVES SRBL2030C THRU SRBL2060C

FIG.1-FORWARD CURRENT DERATING CURVE

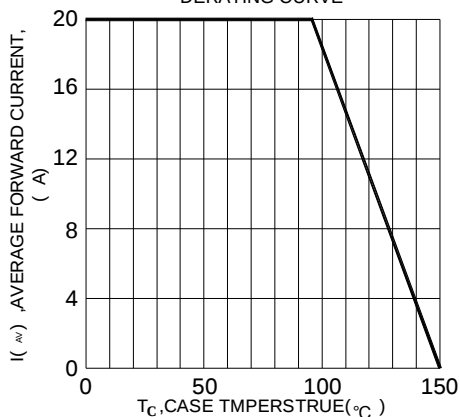


FIG.2-TYPICAL FORWARD CHARACTERISTICS

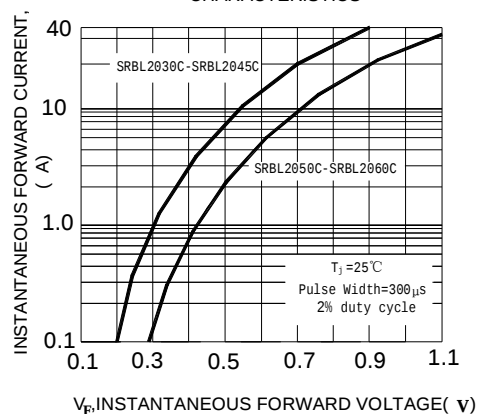


FIG.3 MAX NON-REPETITIVE SURGE CURRENT

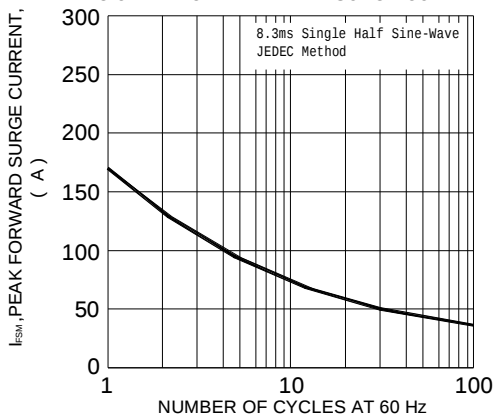


FIG4 TYPICAL JUNCTION CAPACITANCE PER ELEMENT

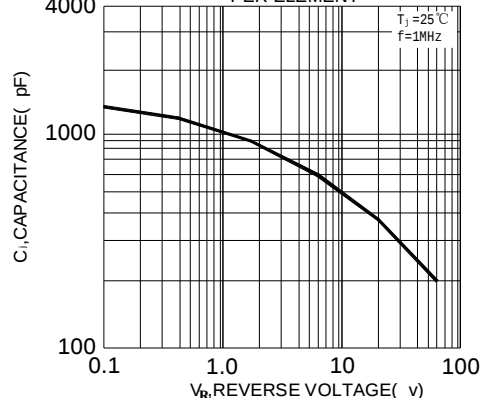


FIG.5-TYPICAL REVERSE CHARACTERISTICS

