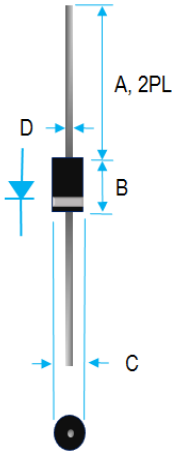
SB2150 THRU SB2200 SPECIFICATION

Rev. A

2A SCHOTTKY BARRIER RECTIFIERS



Dim.	Value Inch[mm]	
	Min.	Max.
A	1.000[25.40]	---
B	0.230[5.84]	0.300[7.62]
C	0.104[2.64]	0.140[3.56]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXTREMELY LOW V_F
3. LOW STORED CHARGE
4. MAJORITY CARRIER CONDUCTION
5. LOW POWER LOSS/HIGH EFFICIENCY
6. CASE: TRANSFER MOLDED, DO-15
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
9. WEIGHT: 0.34 GRAMS
10. RoHS COMPLIANT

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (T_A =25°C UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL		UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT, SEE FIG.1	I_O	2.0	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	50	A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R\theta ja$	40	°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO +150	°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO +150	°C
MAXIMUM REVERSE CURRENT AT 25°C	I_R	0.5	mA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	20	mA

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	TYPICAL JUNCTION CAPACITANCE C_J (pF)[1]	MAXIMUM FORWARD VOLTAGE V_F(V)[4]
SB2150	150	28	110	0.90
SB2200	200	70	110	0.92

NOTE： 1. MEASURED AT 1MHz WITH APPLIED REVERSE VOLTAGE OF 4V.
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1T (mm) COPPER PLATE AT LEAD LENGTH 5mm.
3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.
4. MEASURED AT I_O DC.

667 E. Cochran St., Simi Valley, CA 93065
Phone: 1-805-522-9998, Fax: 1-805-522-9989

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

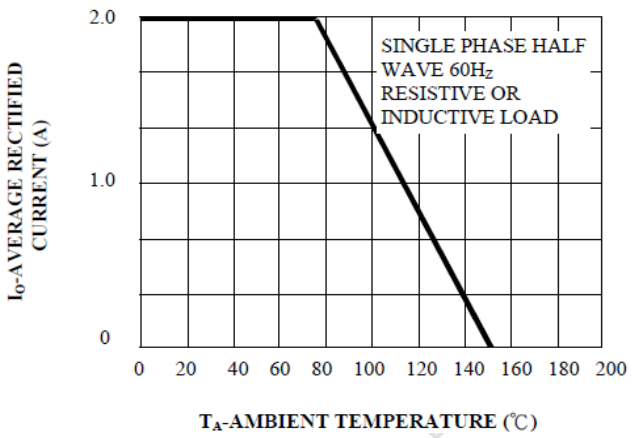


FIG.2 - TYPICL OINSTANTANEOUS FORWARD CHARACTERISTICS

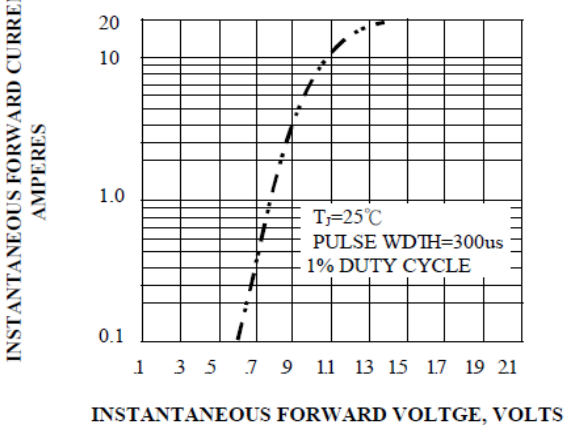


FIG. 3 - TYPICAL REVERSE CHRACTERISTICS

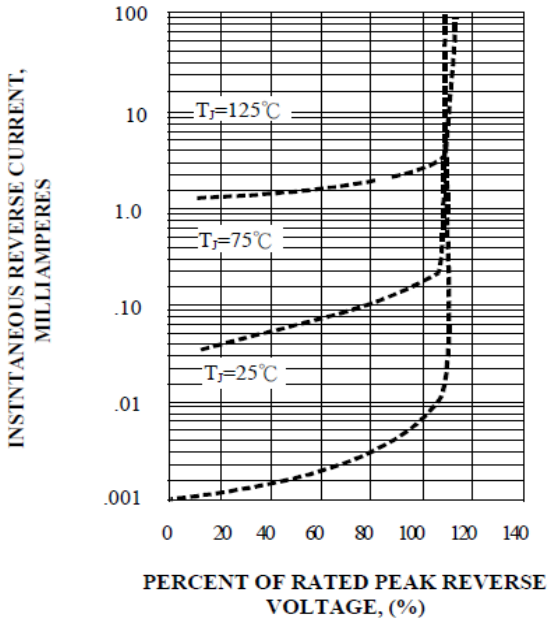


FIG. 4 - MAXIMUM NON-REPETITIVE SURGE CURRENT

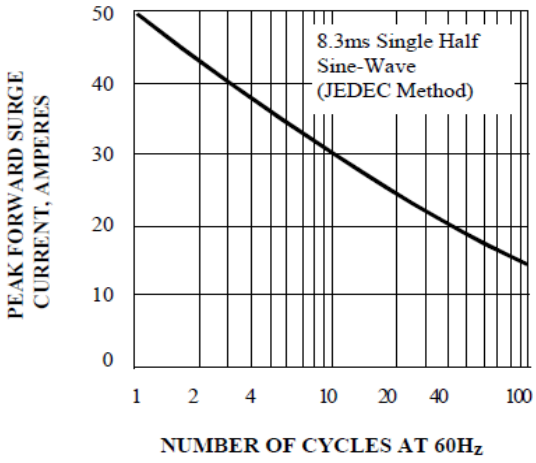


FIG. 5 - TYPICAL JUNCTION CAPACITANCE