Low forward voltage Schottky Barrier Rectifier

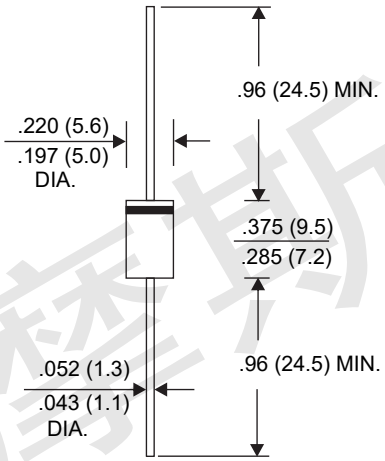
SB5300L 300 V 5.0A

DO-27(DO-201AD)

RoHS COMPLIANT

Features And Mechanical Data

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering:260℃ MAX at 10 seconds, per JESD 22-B106 or MIL-STD-750,method 2026
- Case: JEDEC D0-27(D0-201AD) molded plastic body



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

		Symbols	Min.	Typ.	Max.	Units
Type number			SB5300L			
Marking code			SB5300L			
Maximum recurrent peak reverse voltage		V_{RRM}	-	-	300	Volts
Maximum rms voltage		V_{RMS}	-	-	210	Volts
Maximum dc blocking voltage		V_{DC}	-	-	300	Volts
Maximum average forward rectified current. Lead length @ta(fig 1)		$I_{(AV)}$	-	-	5.0	Amp
Peak Forward Surge Current, 8.3 ms single half- sine-wave Superimposed on rated load (JEDEC method) (Rating of per diode)		I_{FSM}	-	-	120	Amp
Maximum instantaneous forward voltage at $I_{(AV)}$	@ TA=25℃	V_F		0.80	0.85	Volts
	@ TA=125℃			0.52		
Maximum DC reverse current at rated DC blocking voltage per	Tj=25℃	I_R	-	12	50	uA
	Tj=100℃		-	-	15	mA
Typical thermal resistance Between junction and lead		$R_{\Theta JL}$	-	20	-	℃/W
Junction temperature		T_J	-40 to +150			℃
Storage temperature range		T_{STG}	-40 to +150			℃

※**This product The above data sheet typical data meet the Mentioned standards,designers for reference only**

Ordering Information (Example)

Prefered P/N	Package code	Unit weight(g)	Minimum Package(pcs)	Inner box Quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
DO-27	T1	about 1.05	1250	1250	12500	Tape
DO-201AD	B1	about 1.05	250	250	12500	Bulk
DO-201AE	B2	about 1.05	250	250	10000	Bulk

Low forward voltage Schottky Barrier Rectifier

SB5300L 300 V 5.0A

RATINGS AND CHARACTERISTIV CURVES

RoHS COMPLIANT

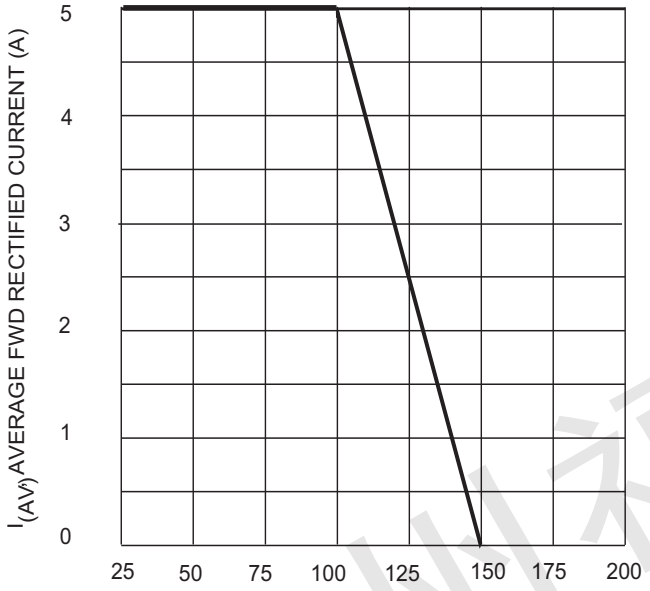


Fig. 1 Forward Derating Curve

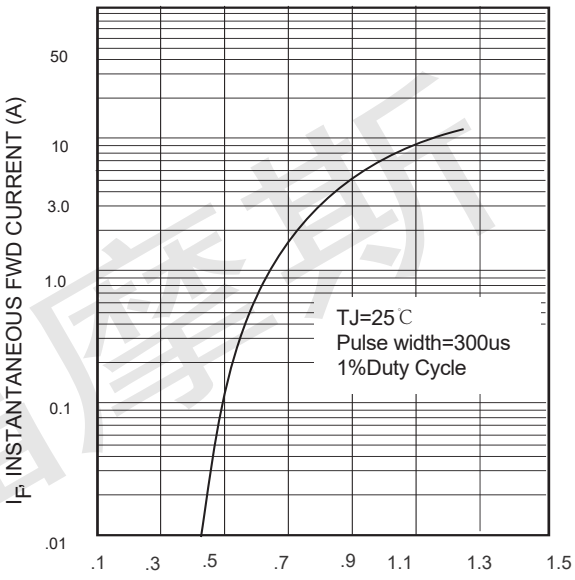


Fig. 2 Typical Forward Characteristics

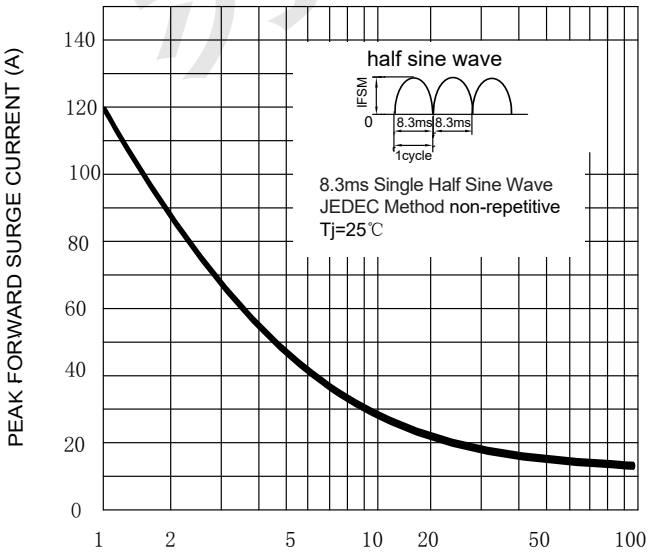


Fig. 3 Peak Forward Surge Current

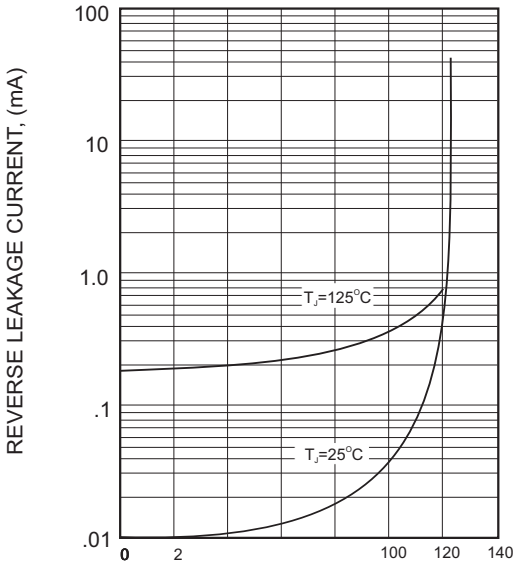


Fig.4-Typical Forward Characteristics

苏州福摩斯