

SR1080L
LOW VF SCHOTTKY RECTIFIERS



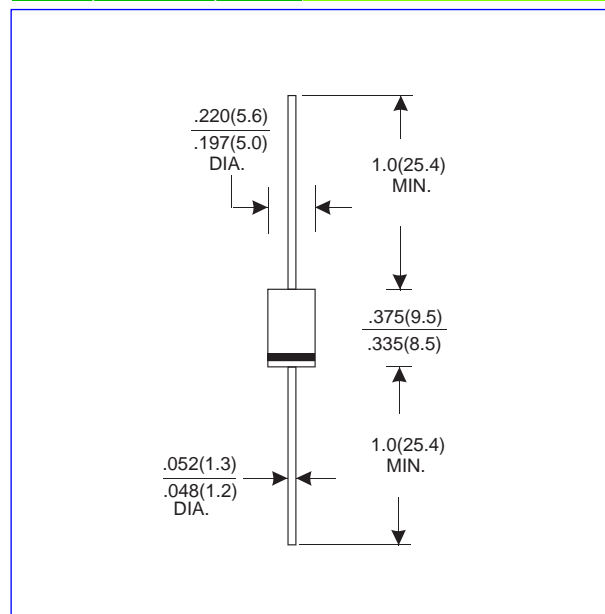
VOLTAGE 80 Volts **CURRENT** 10.0 Amperes **DO-27(DO-201AD)** Unit:Inch(mm)

FEATURES

- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High reliability
- ◆ High surge current capability
- ◆ Epitaxial construction

MECHANICAL DATA

Case : Molded plastic
Epoxy : UL 94V-0 rate flame retardant
Lead : Axial leads, solderable per MIL-STD-202, method 208 guranteed
Polarity : Color band denotes cathode end
Mounting Position : Any
Weight : 1.10 grams
Both normal and Pb free product are available:
 Normal:80~95%Sn,5~20%Pb
Pb free :99 Sn above can meet Rohs enviroment substance directive request



Maximum Ratings (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	SR1080L	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	80	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I _{F(AV)}	10.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I _{FSM}	150	A
Operating junction temperature range	T _J	-55 to+150	°C
Storage temperature range	T _{stg}	-55 to+150	°C

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Test Conditions	Symbol	TYP.	MAX.	Unit	
Instaneous forward voltage	I _F =10.0A	V _F ¹⁾	T _A =25°C	0.58	0.62	V
			T _A =100°C	0.55	—	
			T _A =125°C	0.54	—	
Reverse current	V _R =80V	I _R ²⁾	T _A =25°C	15	200	μA
			T _A =100°C	2	—	mA
			T _A =125°C	7	—	
Typical junction capacitance	4V, 1MHz	C _J	570		pF	

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
 2.Pulse test: pulse width≤40ms

SR1080L
LOW VF SCHOTTKY RECTIFIERS



RATING AND CHARACTERISTIC CURVES

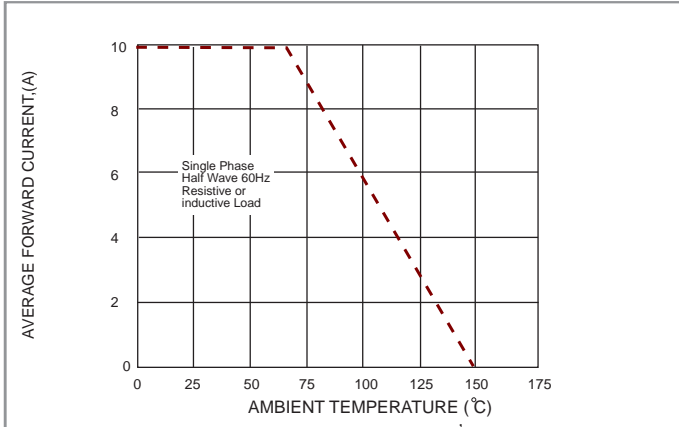


Fig.1 FORWARD CURRENT DERATING CURVE

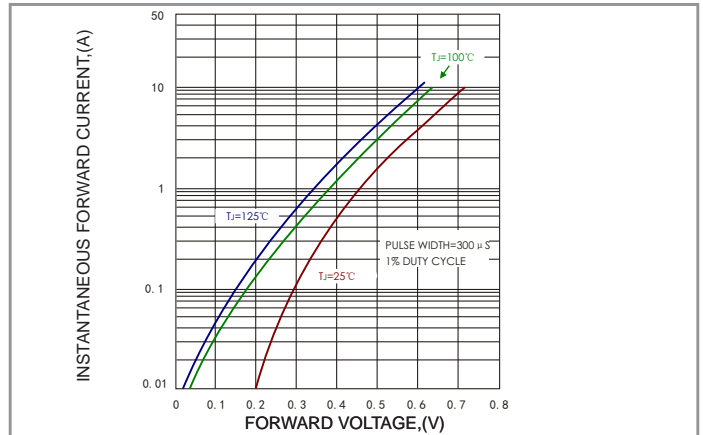


Fig.2-TYPICAL INSTANTANEOUS FORWARD

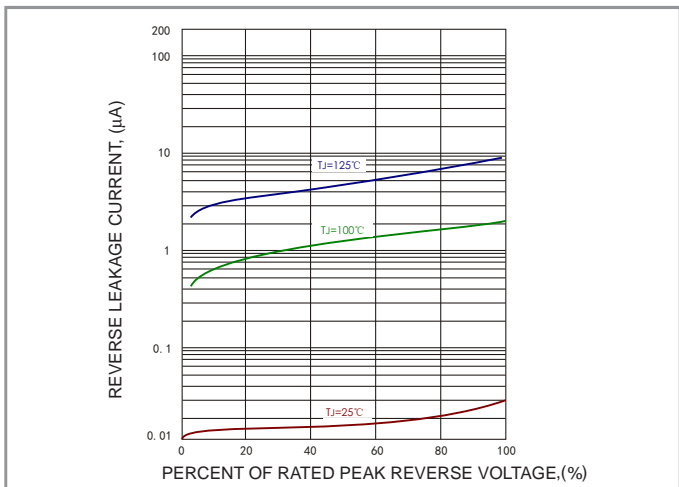


Fig.3 TYPICAL REVERSE CHARACTERISTICS

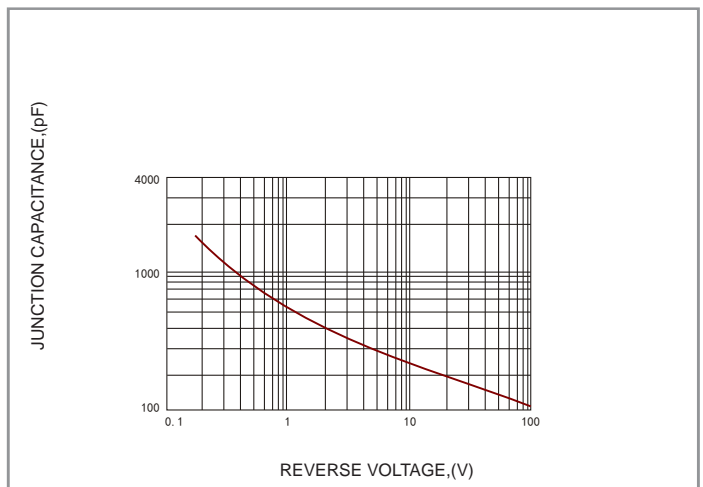


Fig.4 TYPICAL JUNCTION CAPACITANCE

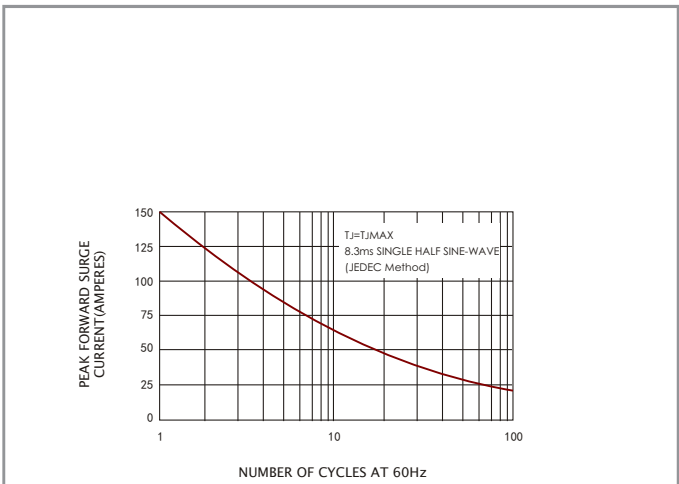


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

SR1080L
LOW VF SCHOTTKY RECTIFIERS



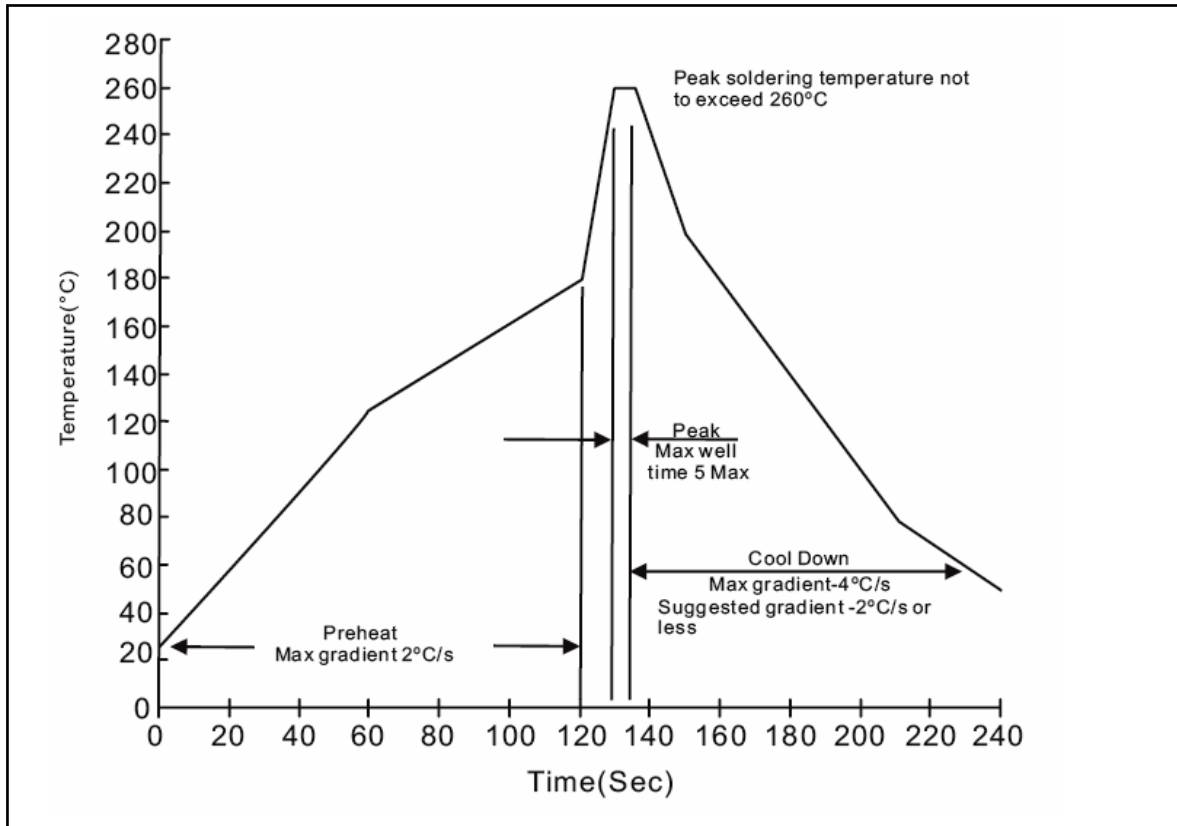
Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	SR1080L	Unit
Typical thermal resistance ³⁾	R _{θJA}	25.0	°C/W
	R _{θJL}	8.0	

3.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

SUGGESTED THERMAL PROFILES FOR SOLDERING PROCESSES

LEAD FREE TEMPERATURE PROFILE WAVE-SOLDERING



ORDER INFORMATION

• Packing information

Product code	Pack	Box Size L*W*H(mm)	Quantity(pcs/box)	Carton SizeL*W*H(mm)	Quantity(box/carton)
SR1080L-DO-201AD	T/B	264*74*135	1000 or 1250	400*267*286	10

SR1080L

LOW VF SCHOTTKY RECTIFIERS



Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from niuhang Electronics co., LTD
- Niuhan Electronics co., LTD. reserves the rights to make changes of the content herein the document anytime without notification.
- Niuhan Electronics co., LTD. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Niuhan Electronics co., LTD. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Niuhan Electronics co., LTD. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Niuhan Electronics co., LTD. for any damages resulting from such improper use or sale.
- When the appearance of the product and chip size does not change, in order to product quality, change the internal structure and the production process Niuhan can not notify the customer.