

Features

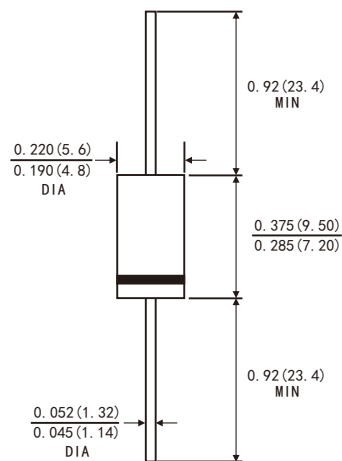
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- Halogen-free
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



HALOGEN
FREE



DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.15 grams

Typical Applications

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

Maximum Ratings

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

PRIMARY CHARACTERISTICS	
$I_{F(AV)}$	15.0A
V_{RRM}	120V
I_{FSM}	250A
V_f at $I_F=15.0A, 25^\circ C$	0.77V
T_{JMAX}	150°C

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	120	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{F(AV)}$	15.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	250	A
Operating junction temperature range	T_j	-55 to +150	°C
Storage temperature range	T_{stg}	-55 to +150	°C

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instaneous forward voltage	T _J =25°C	I _F =1.0A	V _F ¹⁾	0.40	-	V
		I _F =5.0A		0.54	-	
		I _F =10.0A		0.67	-	
		I _F =15.0A		0.77	0.85	
	T _J =125°C	I _F =1.0A		0.29	-	
		I _F =5.0A		0.48	-	
		I _F =10.0A		0.57	-	
		I _F =15.0A		0.62	0.68	
Reverse current	T _J =25°C	V _R =120V	I _R ²⁾	-	50	μA
	T _J =125°C			-	25	mA
	T _J =125°C			V _R =100V	-	
Typical junction capacitance	4V,1MHz		C _J	525		pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width≤40ms

Thermal Characteristics

Parameter	Symbol	SR15120LH	Unit
Typical thermal resistance ³⁾	R _{θJA}	25.0	°C/W
	R _{θJL}	8.0	

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

Available Pack Information

Product code	Pack	Box Size L*W*H(mm)	Quantity (pcs/box)	Carton SizeL*W*H (mm)	Quantity (box/carton)
SR15120LH-DO-201AD	B/P	190*80*21	200	433*203*230	50
SR15120LH-DO-201AD	T/B	264*74*135	1000	400*267*286	10

Fig.1-Forward Current Derating Curve

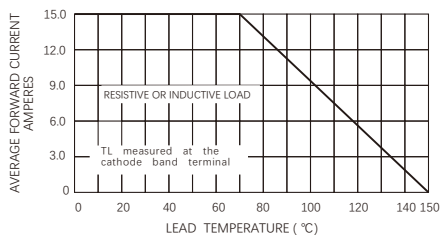


Fig.2-Maximum Non-repetitive Peak Forward Surge Current

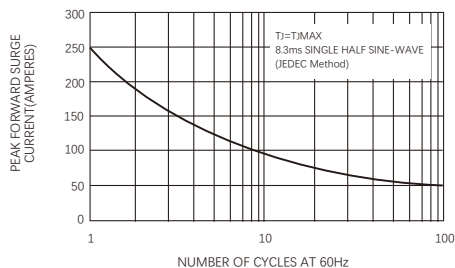


Fig.3-Typical Instantaneous Forward Characteristics

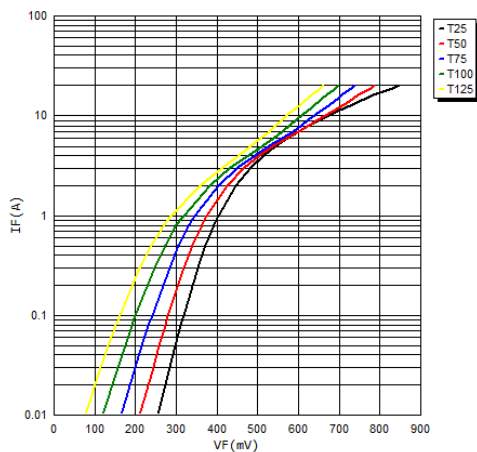


Fig.4-Typical Reverse Characteristics

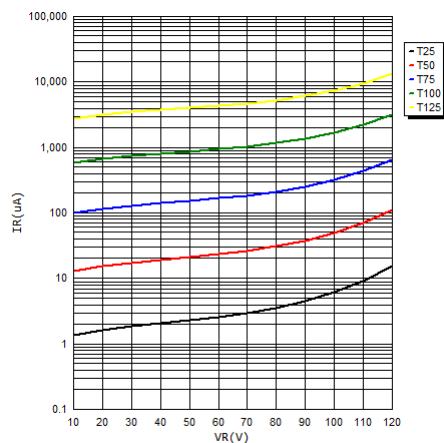
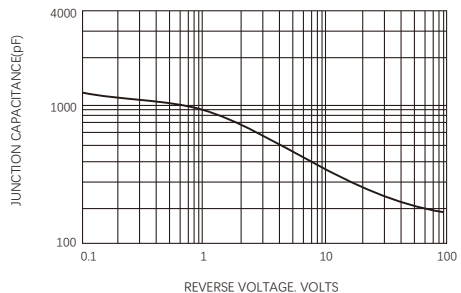


Fig.5-Typical Junction Capacitance



Friendship Reminder

- JiNan JingHeng (hereinafter referred to as JH) reserves the right to make changes to this document and its products and specifications at anytime without notice.
济南晶恒（以下简称JH）保留，未经通知变更本文件和与本文件相关的产品及规格的权利。
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
使用方应在使用、采购本产品之前获取并确认产品信息和规格书的最新版本。
- JH makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does JH assume any liability for application assistance or customer product design.
JH对其产品用于某特定用途的适用性，既不做任何保证、说明或担保、也不承担任何应用协助或使用方设计的法定责任。
- JH does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
JH不保证或承担任何责任，其产品被采购使用于任何非预期或授权的应用。
- No license is granted by implication or otherwise under any intellectual property rights of JH.
此规格书属于JH的知识产权，没有经过我司授权不得抄袭。
- JH's products are not authorized for use as critical components in life support devices or systems without express written approval of JH.
没有JH的书面授权，JH的产品不能在生命支撑设备或系统里作为关键零件使用。