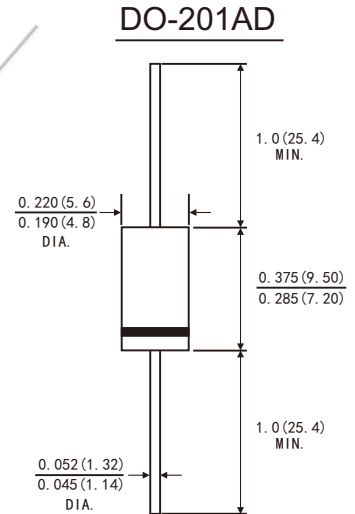
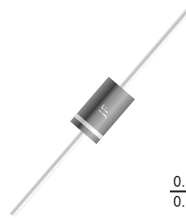


FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Good for switching mode application
- Lead (Pb)-free component
- Component in accordance to RoHS 2015/863/EU
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified, Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.)

	Symbols	SF 51G	SF 52G	SF 53G	SF 54G	SF 55G	SF 56G	SF 58G	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	Volts	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length	I_{AV}	5.0							Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps	
Maximum Instantaneous Forward Voltage at 5.0 A	V_F	0.95				1.3		1.7	Volts	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_A=25^{\circ}C$	I_R							5.0	μA
	$T_A=100^{\circ}C$									
Maximum Reverse Recovery Time(Note1)	T_{rr}	35							nS	
Typical Junction Capacitance(Note2)	C_j	50							pF	
Typical Thermal Resistance(Note3)	$R_{\theta JL}$	6.0							$^{\circ}C/W$	
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$	
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$	

Note: 1.Reverse Recovery Test conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.

2.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

RATINGS AND CHARACTERISTIC CURVES OF SF51G THRU SF58G

FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

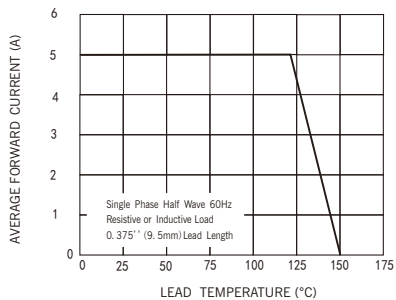


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

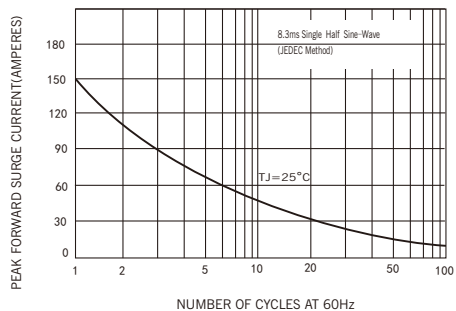


FIG.3-TYPICAL FORWARD CHARACTERISTICS

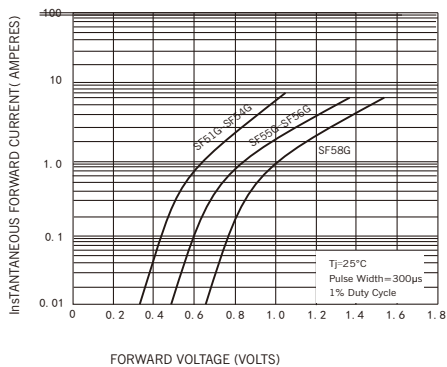


FIG.4-TYPICAL REVERSE CHARACTERISTICS

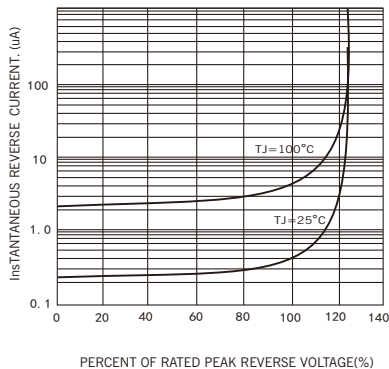
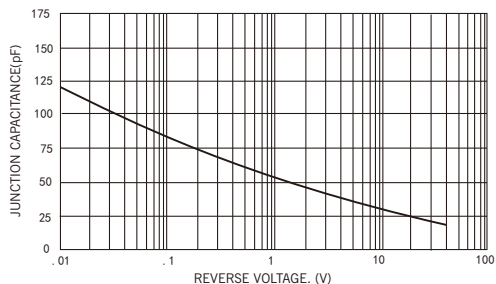


FIG.5-TYPICAL JUNCTION CAPACITANCE



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。