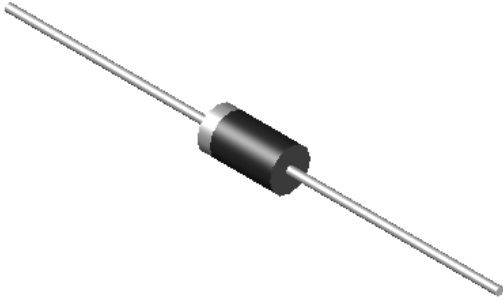


## Schottky Barrier Rectifier

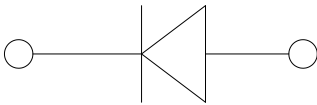


### Features

- Guardring for overvoltage protection
- Low power loss
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

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



### Mechanical Data

- **Package:** DO-201AD (DO-27)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR520	SR540	SR560	SR5100	SR5150	SR5200
Device marking code			SR520	SR540	SR560	SR5100	SR5150	SR5200
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	20	40	60	100	150	200
Average Rectified Output Current @60Hz sine wave, Resistance load, $T_a$ (FIG.1)	$I_O$	A	5.0					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	$I_{FSM}$	A	120					
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-55 ~+150					
Junction Temperature	$T_j$	$^\circ\text{C}$	-55 ~+125			-55 ~+150		

### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SR520	SR540	SR560	SR5100	SR5150	SR5200
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM}=5.0A$	0.55		0.7	0.85		
Maximum DC reverse current at rated DC blocking voltage per diode	$I_R$	mA	$T_a=25^\circ\text{C}$	0.2			0.1		
			$T_a=100^\circ\text{C}$	20			5		
Typical junction capacitance	$C_j$	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	280		220	180	100	



# SR520 THRU SR5200

## ■ Thermal Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	20								

## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR520~SR5200	D1	Approximate 1.05	1250	1250	12500	Tape
SR520~SR5200	C1	Approximate 1.05	250	250	12500	Bulk

## ■ Characteristics (Typical)

FIG.1:  $I_o$ - $T_a$  Curve

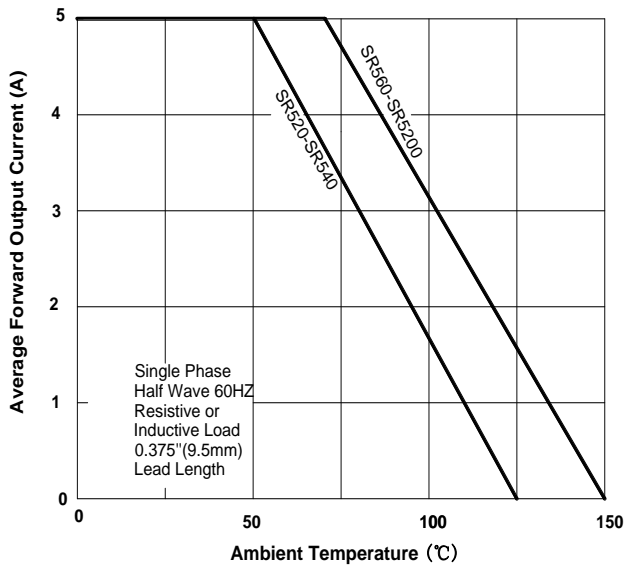


FIG.2: Forward Surge Current Capability

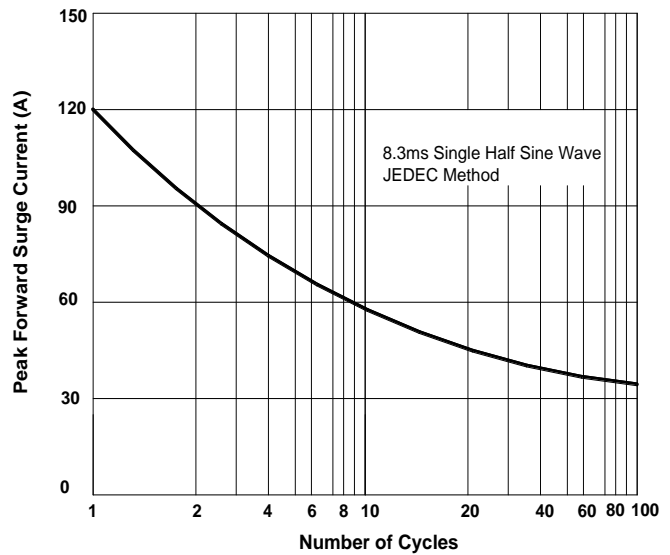


FIG.3: Forward Voltage

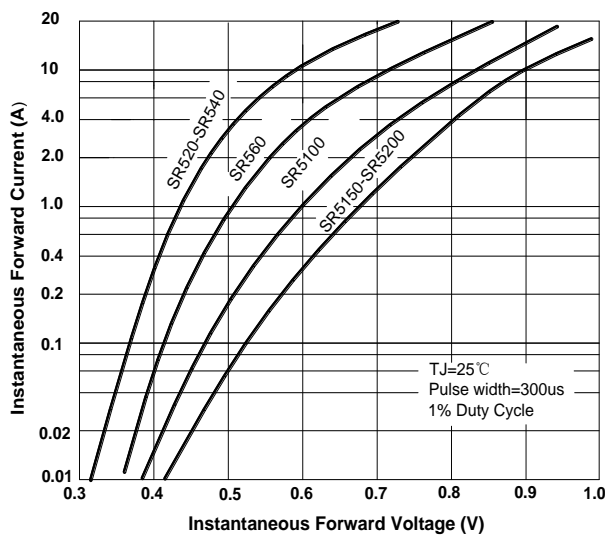
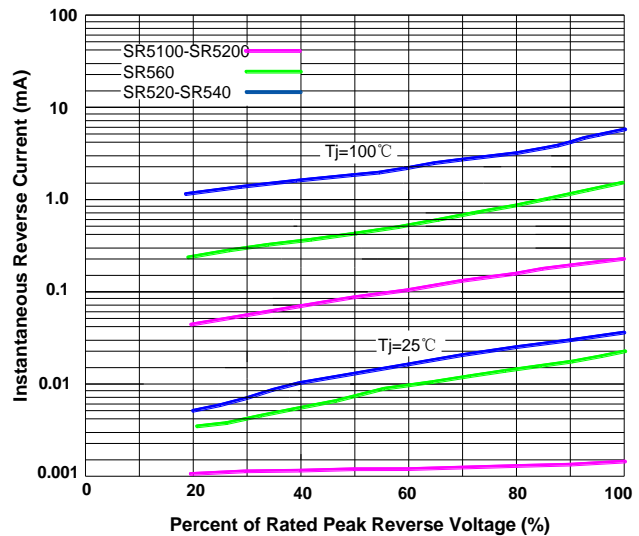
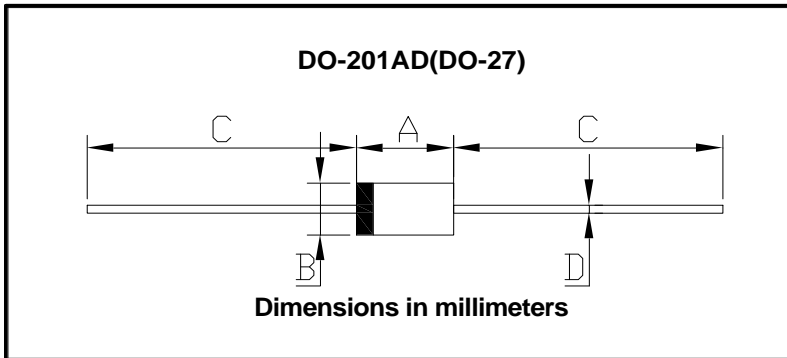


FIG.4: Typical Reverse Characteristics





## ■ Outline Dimensions



<b>DO-201AD(DO-27)</b>		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



## SR520 THRU SR5200

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