

### Axial Lead Schottky Barrier Rectifiers

**(Pb)** Lead(Pb)-Free

#### FEATURES:

- \* Low forward voltage drop
- \* Low power loss, high efficiency.
- \* High current capability, low forward voltage drop.
- \* High surge capability.
- \* Ultra high-speed switching.
- \* Silicon epitaxial planar chip, metal silicon junction.
- \* Lead-free parts meet environmental standards of MIL-STD-19500 /228

**REVERSE VOLTAGE**  
**20 TO 100 VOLTS**  
**FORWARD CURRENT**  
**5.0 AMPERE**



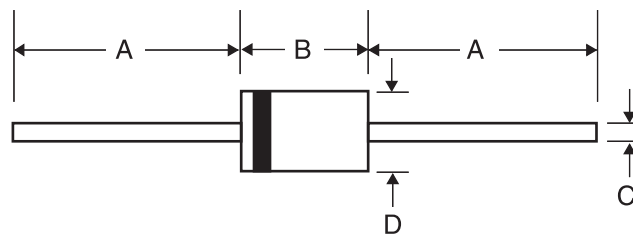
#### MECHANICAL DATA:

- \* 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

### DO-201AD Outline Dimensions

Unit:mm

**Axial Device (Through-Hole)**



Dim	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
DO-201AD	25.40	-	7.30	9.50	1.20	1.30	4.80	5.60

## Maximum Rating

Characteristic	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_R$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig.1	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	110							A
Thermal Resistance	$R_{\theta JA}$	10							°C/W
Diode Junction Capacitance f=1MHz and applied 4V DC reverse voltage	$C_J$	380							pF
Operating Junction Temperature Range	$T_J$	-65 to +125			-65 to +150				°C
Storage Junction Temperature Range	$T_{STG}$	-65 to +150							°C

## Electrical Characteristic

Characteristic	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNIT
Maximum Instantaneous Forward Voltage $I_F=5.0A$	$V_F$	0.55			0.70		0.85		V
Maximum Instantaneous Reverse Current Rated DC Blocking Voltage, $T_A=25^\circ C$ Rated DC Blocking, $T_A=100^\circ C$	$I_R$	5.0 50							mA

RATING AND CHARACTERISTIC CURVES

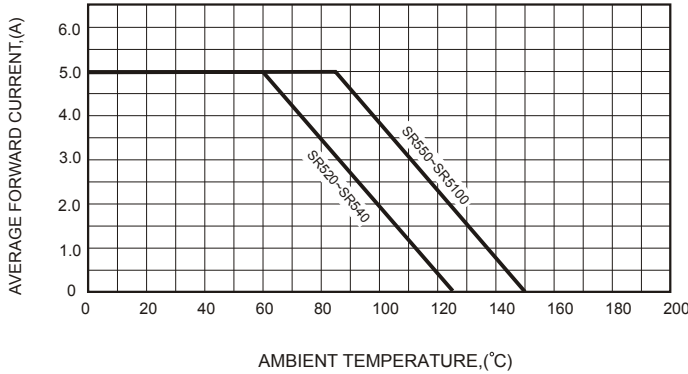


FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

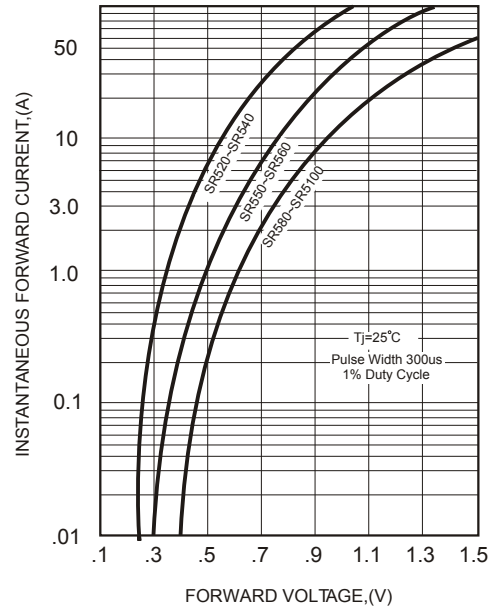


FIG.2-TYPICAL FORWARD CHARACTERISTICS

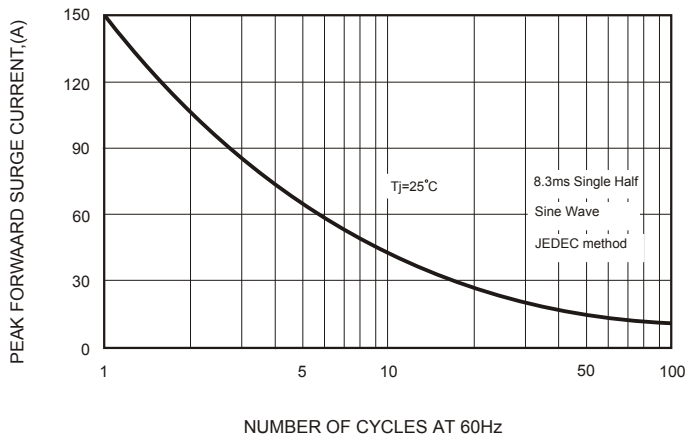


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

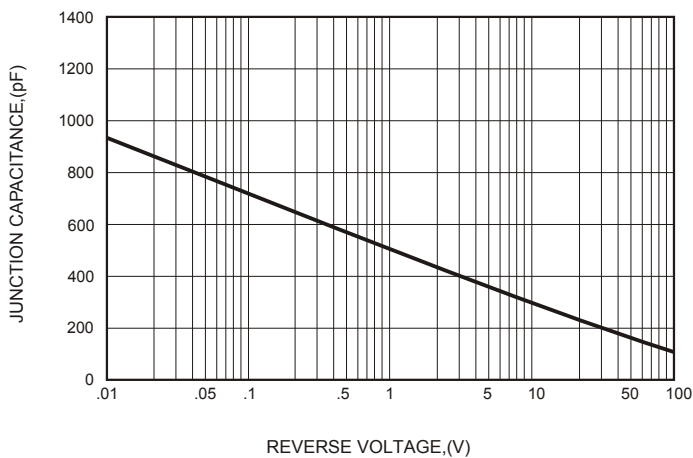


FIG.4-TYPICAL JUNCTION CAPACITANCE

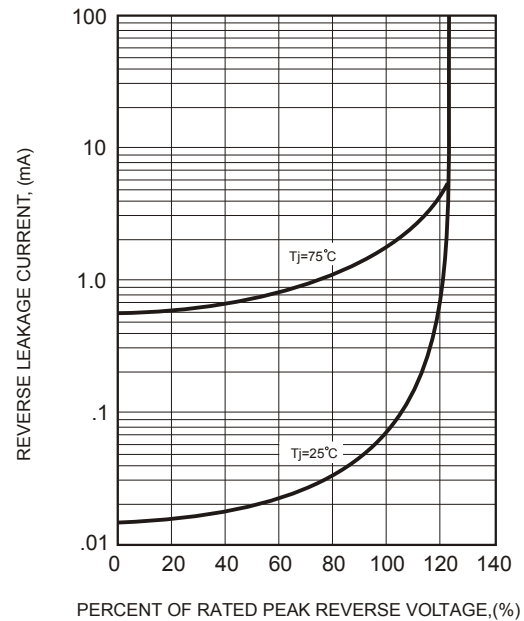


FIG.5 - TYPICAL REVERSE CHARACTERISTICS