



# SR1202 - SR1204

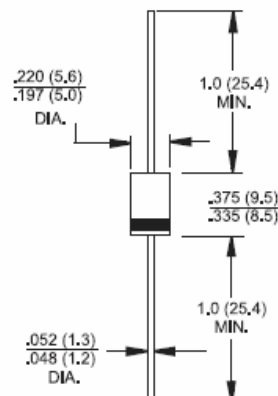
## 12.0 AMP. Schottky Barrier Rectifiers DO-201AD

### Features

- ✧ Low power loss, high efficiency.
- ✧ High current capability, Low VF.
- ✧ High reliability
- ✧ High surge current capability.
- ✧ Epitaxial construction.
- ✧ Guard-ring for transient protection.
- ✧ For use as Bypass diode in Solar application.
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

### Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode.
- ✧ High temperature soldering guaranteed: 260°C/10 seconds / .375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.1 gram



### Dimensions in inches and (millimeters) Marking Diagram



SR120X = Specific Device Code  
 G = Green Compound  
 Y = Year  
 WW = Work Week

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SR1202	SR1203	SR1204	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	V
Maximum Average Forward Rectified Current .R-load @TA = 50°C (Note 1)	$I_{(AV)}$	12			A
Repetitive Peak Forward Current f > 15 Hz (Note 1)	$I_{FRM}$	55			A
Peak Forward Surge Current, 50/60 Hz Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	280 / 320			A
Maximum Instantaneous Forward Voltage @ 5.0A @ TA=25°C @ 12.0A	$V_F$	0.45 0.55			V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	$I_R$	500 20			uA mA
Rating for fusing t < 10ms @ TA=25°C	$I^2t$	390			A <sup>2</sup> S
Maximum Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	24 3			°C/W
Junction Temperature Range - in DC forward mode	$T_J$	-50 to +150 <=200			°C
Storage Temperature Range	$T_{STG}$	-50 to +175			°C

Notes: 1. Valid, if leads are kept at ambient temperature at a distance of 10 mm from case.

RATINGS AND CHARACTERISTIC CURVES (SR1202 THRU SR1204)

