

SR520 THRU SR5200

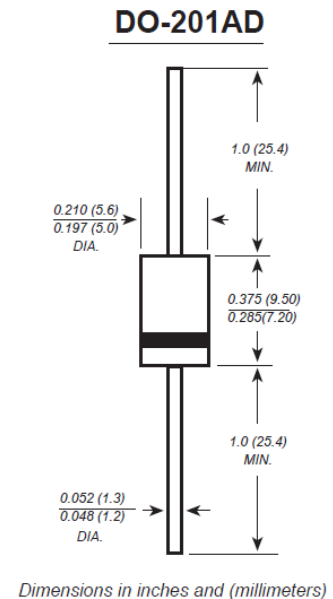
Schottky Barrier Rectifiers
Reverse Voltage – 20 to 200 V
Forward Current – 5 A

Features

- High current capability
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

Mechanical Data

- **Case:** Molded plastic body, DO-201AD
- **Epoxy:** UL-94V-O rate flame retardant
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



Absolute Maximum Ratings and Characteristics

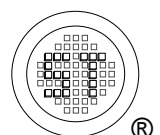
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Parameter	Symbols	SR 520	SR 530	SR 540	SR 550	SR 560	SR 580	SR 5100	SR 5150	SR 5200	Units
Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
RMS Voltage	V _{RMS}	14	21	28	35	42	57	71	105	140	V
DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Average Forward Rectified Current 0.375"(9.5mm) Lead Length	I _{F(AV)}	5									A
Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on Rated Load (JEDEC method at rated TL)	I _{FSM}	150									A
Instantaneous Forward Voltage at 5.0 A ¹⁾	V _F	0.55			0.7		0.85		0.9	0.95	V
Instantaneous Reverse Current ^{T_a = 25°C} at Rated DC Blocking Voltage ¹⁾ ^{T_a = 100°C}	I _R	0.5									mA
		50			25						
Typical Junction Capacitance ²⁾	C _J	500			400						PF
Typical Thermal Resistance ³⁾	R _{θJA}	25									°C/W
	R _{θJL}	8									
Operating Junction Temperature Range	T _J	-65 to+125			-65 to+150						°C
Storage Temperature Range	T _{STG}	-65 to+150									°C

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

²⁾ Measured at 1MHz and reverse voltage of 4 V

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



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