

SS52C THRU SS520C

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 20 to 200V
Forward Current - 5.0A

FEATURES

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings and Electrical characteristics

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

Parameter	Symbol	SS52C	SS54C	SS56C	SS59C	SS510C	SS512C	SS515C	SS520C	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V	
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	84	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V	
Maximum Average Forward Rectified Current	I_{FAV}	5.0								A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175				150				A	
Max Instantaneous Forward Voltage at 5 A	V_F	0.45	0.55	0.70		0.85			V		
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	1.0				50				mA	
Typical Junction Capacitance ⁽¹⁾	C_j	600		400						pF	
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	35									°C/W
Operating Junction Temperature Range	T_J	-55 ~ +150									°C
Storage Temperature Range	T_{stg}	-55 ~ +150									°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.