

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any



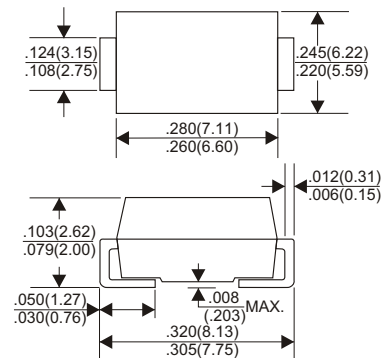
VOLTAGE RANGE

20 to 60 Volts

CURRENT

5.0 Amperes

DO-214AB(SMC)



Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	B520C	B530C	B540C	B550C	B560C	Unit
Peak Repetitive Reverse Voltage	V _{RRM}						
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	V
DC Blocking Voltage	V _R						
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	V
Average Rectified Output Current	I _O	5.0					A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	100					A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Thermal Resistance, Junction to Terminal	R _{θJT}	10	°C/W
Thermal Resistance, Junction to Ambient (Note 5)	R _{θJA}	50	°C/W
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

B520C THRU B560C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic		Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	B520C, B530C, B540C B550C, B560C	V _F	— —	0.475 0.575	0.55 0.70	V	I _F = 5.0A, T _A = +25°C
Leakage Current (Note 6)		I _R	— —	— —	0.5 20	mA	@ Rated V _R , T _A = +25°C @ Rated V _R , T _A = +100°C
Total Capacitance		C _T	—	—	300	pF	V _R = 4V, f = 1MHz

Notes: 5. Thermal Resistance: Junction to ambient, unit mounted on PC board with 8.0 mm² (0.033mm thick) copper pads as heatsink.
6. Short duration pulse test used to minimize self-heating effect.

RATING AND VCHARACTERISTIC CURVES(B520C THUR B560C)

