

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- Built-in strain relief ,ideal for automated placement
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: JEDEC SMC(DO-214AB) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.007ounce,0.21 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

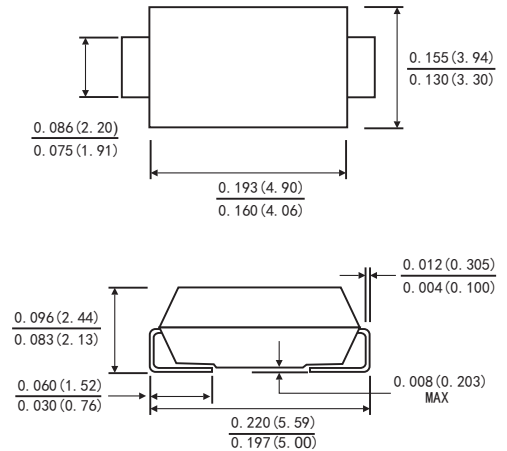
(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	CH 1020B	CH 1040B	CH 1065B	CH 1080B	CH 10100B	CH 10150B	CH 10200B	Units	
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	65	80	100	150	200	Volts	
Maximum RMS voltage	V _{RMS}	14	28	42	56	71	105	140	Volts	
Maximum DC blocking voltage	V _{DC}	20	40	65	80	100	150	200	Volts	
Maximum average forward rectified current (see fig.1)	I(AV)	8.0							Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T _J)	I _{FSM}	150.0							Amps	
Maximum instantaneous forward voltage at 8.0 A(Note 1)	V _F	0.55		0.70	0.85		0.95		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	500				50				μA
	T _A =125°C	50				10				mA
Typical thermal resistance (Note 2)	R _{θJA}	47.0							°C/W	
	R _{θJL}	17.0								
Operating junction temperature range	T _J	-55 to+150							°C	
Storage temperature range	T _{STG}	-55 to+150							°C	

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

2. P.C.B. mounted 0.55X0.55"(14X14mm) copper pad areas

SMB(DO-214AA)



Dimensions in inches and (millimeters)

FIG.1-FORWARD CURRENT DERATING CURVE

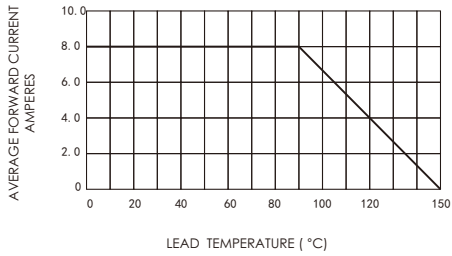


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

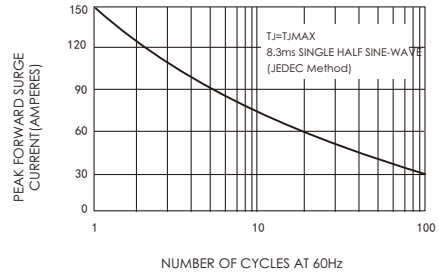


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

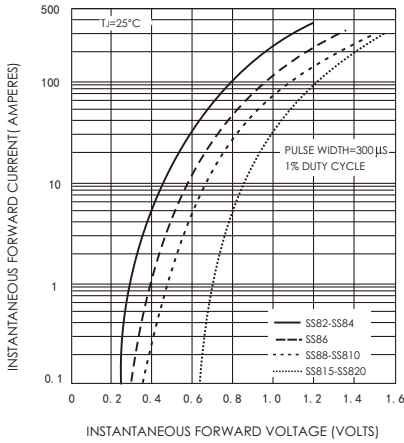


FIG.4-TYPICAL REVERSE CHARACTERISTICS

