WILLAS

RoHS COMPLIANT

FM301B THRU FM307B

3.0 Amp Glass Passivated Super Fast Rectifiers - 50~1000Volts

SMB Package

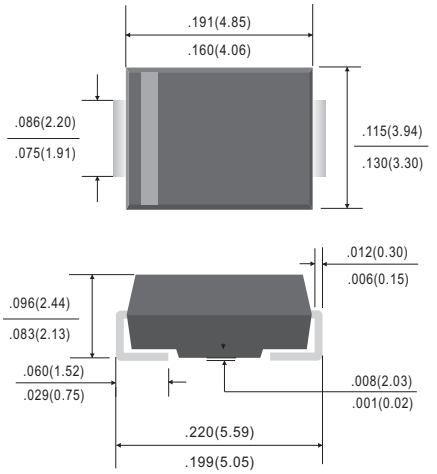
Features

- Glass Passivated Chip
- Ideal for surface mounted applications
- Low leakage current
- Metallurgic ally bonded construction
- Moisture Sensitivity Level 1
- RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

Mechanical Date

- Case: Molded Plastic, SMB(DO214AA)
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable per MIL-STD-202,
  method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.004 ounce, 0.104 gram (Approximate)

SMB(DO-214AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

RATING		SYMBOLS	FM301B	FM302B	FM303B	FM304B	FM305B	FM306B	FM307B	UNITS
Marking code			3B1	3B2	3B3	3B4	3B5	3B6	3B7	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward rectifier Current 0.375" (9.5mm) Lead length at Fig.1		$I_{F(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	100							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ Ta=25℃	I_R	5.0							μA
	@ Ta=100℃		100							
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	40							℃/W
		$R_{\theta JC}$	15							
Typical Junction Capacitance(Note 1)		C_J	60							pF
Operating and Storage Temperature Range		T_J ,T_{STG}	-55 ~ 150							℃

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0VDC.
2. Thermal Resistance junction to ambient, 10.0*10.0 mm^2 copper pads to each terminal.
   Thermal Resistance junction to case, 10.0*10.0 mm^2 copper pads to each terminal.

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RATING AND CHARACTERISTICS CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

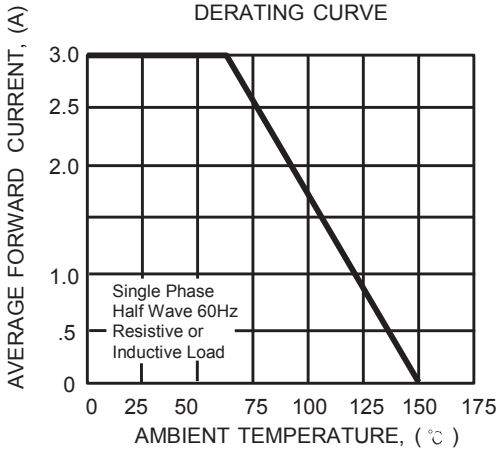

FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

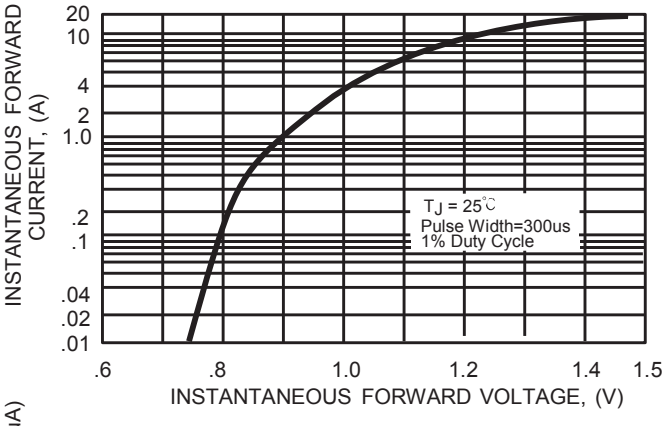

FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

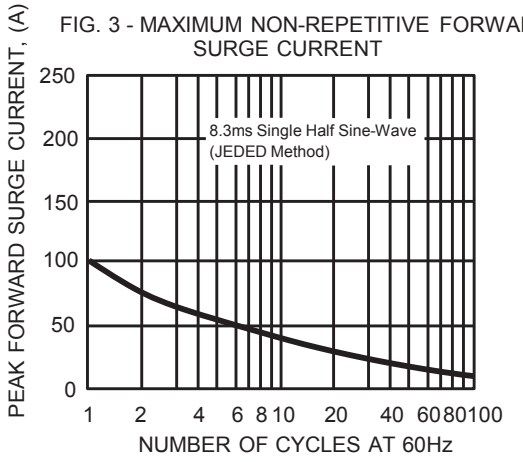

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

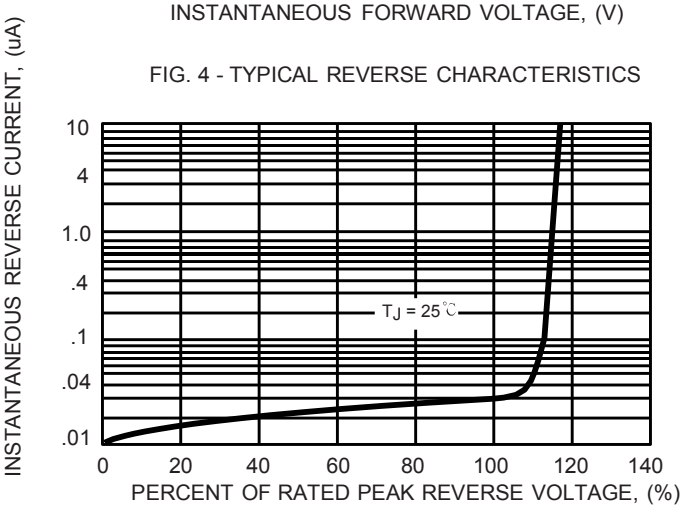

FIG. 5 - TYPICAL JUNCTION CAPACITANCE