

SMBYW01-200

PRV : 200 Volts
Io : 1 Ampere

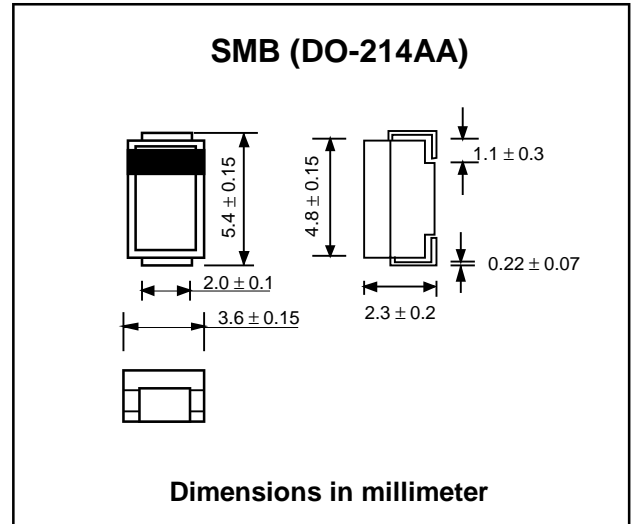
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast recovery time
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMB Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.1079 gram

SURFACE MOUNT SUPER FAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	V
Maximum Average Forward Current (See Fig. 1)	IF(AV)	1.0	A
Maximum Non-repetitive Peak Forward Surge Current (tp = 10 ms sinusoidal)	IFSM	60	A
Maximum Peak Forward Voltage at IF = 1 A.	VF	0.90	V
Maximum Reverse Leakage Current	IR	3.0 (TJ = 25°C)	μA
	IR(H)	400 (TJ = 150°C)	
Maximum Reverse Recovery Time (Note 1)	Trr	25	ns
Maximum Thermal Resistance, Junction to Lead	RθJL	13	°C/W
Maximum Junction Temperature Range	TJ	150	°C
Storage and Junction Temperature Range	TSTG	-65 to 150	°C

Note :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

RATING AND CHARACTERISTIC CURVES (SMBYW01-200)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

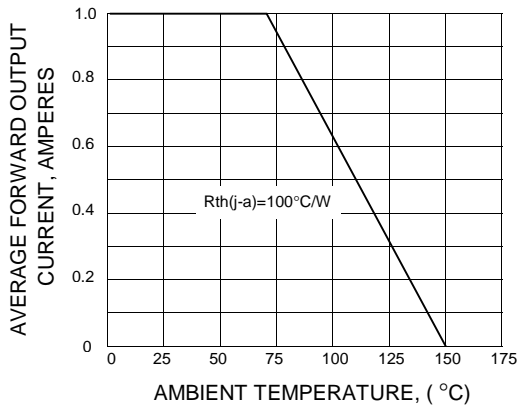


FIG.2 - AVERAGE FORWARD POWER DISSIPATION VERSUS AVERAGE FORWARD CURRENT

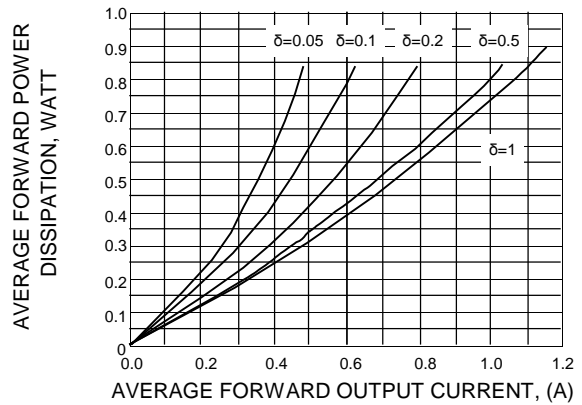


FIG.3 - MAXIMUM FORWARD VOLTAGE DROP VERSUS FORWARD CURRENT

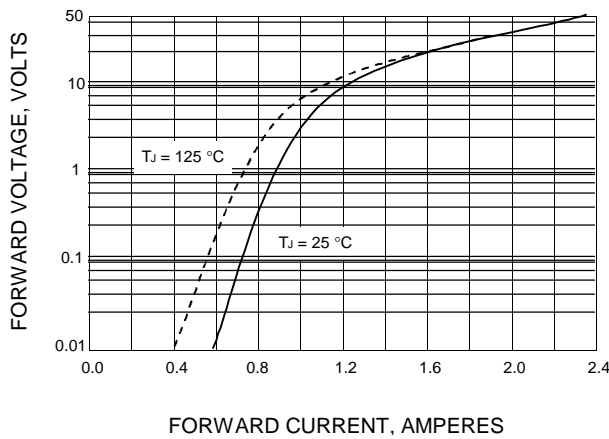


FIG.4 - TYPICAL JUNCTION CAPACITANCE VERSUS VOLTAGE APPLIED

