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BAV19W ~ BAV21W

SURFACE MOUNT SWITCHING DIODES

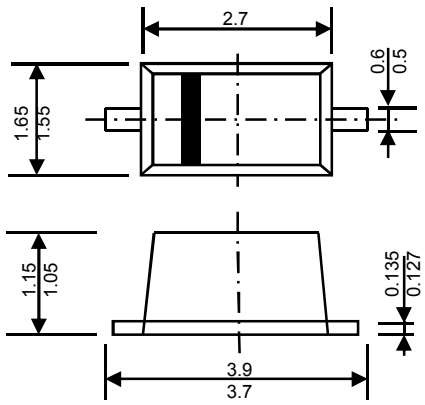
FEATURES :

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-123 plastic Case
- * Weight : approx. 0.01 g
- * Marking Code : " JX "

SOD-123



Dimensions in millimeters

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter		Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	BAV19W	V_{RRM}	120	V
	BAV20W		200	
	BAV21W		250	
Reverse Voltage	BAV19W	V_{RM}	100	V
	BAV20W		150	
	BAV21W		200	
Average Rectified Output Current		I_O	200	mA
Forward Continuous Current		I_{FM}	400	mA
Maximum Power Dissipation		P_D	250	mW
Maximum Repetitive Peak Forward Current		I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at t = 1ms		I_{FSM}	2.5	A
t = 1s			0.5	
Operating Junction Temperature		T_J	-65 to + 150	°C
Storage Temperature Range		T_{STG}	-65 to + 150	°C

Electrical Characteristics (T_J = 25°C unless otherwise noted)

Parameter		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage		V_F	I_F = 100 mA	-	-	1.0	V
			I_F = 200 mA	-	-	1.25	
Reverse Breakdown Voltage	BAV19W	$V_{(BR)R}$	I_R = 100 µA	120	-	-	V
	BAV20W			200	-	-	
	BAV21W			250	-	-	
Reverse Current	BAV19W	I_R	V_R = 100 V	-	-	100	nA
	BAV20W		V_R = 150 V	-	-	100	
	BAV21W		V_R = 200 V	-	-	100	
Diode Capacitance		Cd	f = 1MHz ; V_R = 0	-	-	5.0	pF
Reverse Recovery Time		Trr	I_F = 30mA , I_R = 30mA I_{RR} = 0.1I_R , R_L = 100 Ω	-	-	50	ns

RATING AND CHARACTERISTIC CURVES (BAV19W ~ BAV21W)

FIG. 1 POWER DERATING CURVE

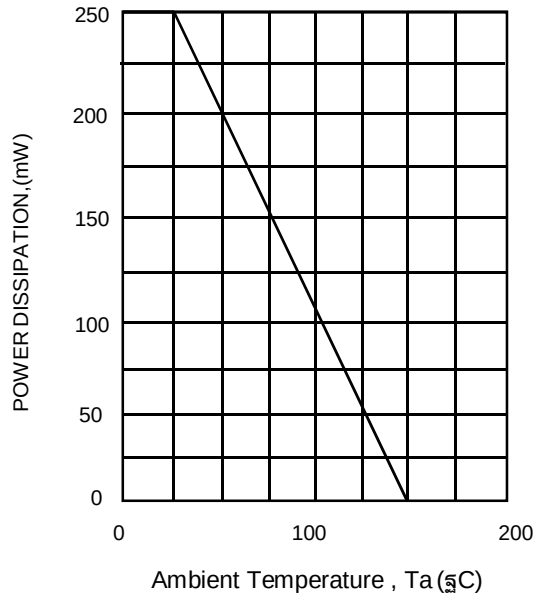


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

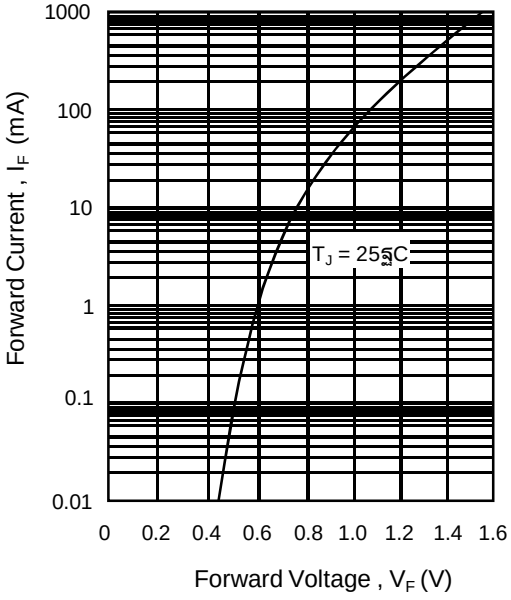


FIG. 3 TYPICAL REVERESE CURRENT VERSUS JUNCTION TEMPERATURE