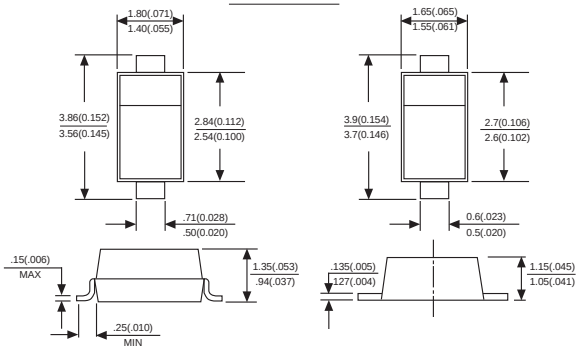
BAV19W-BAV21W

FAST SWITCHING DIODES

SOD-123



Dimensions in millimeters and (inches)

FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Marking: BAV19W:A8, BAV20W:T2, BAV21W:T3

Maximum ratings and electrical characteristics, Single diode @T_A=25℃

PARAMETER	SYMBOLS	BAV19W	BAV20W	BAV21W	UNITS
Peak repetitive peak reverse voltage Working peak reverse voltage DC Blocking voltage	V_{RRM} V_{RWM} V_R	100	150	200	V
RMS Reverse voltage	$V_{R(RMS)}$	71	106	141	V
Forward continuous current	I_{FM}	400			mA
Average rectified output current	Io	200			mA
Peak forward surge current @=1.0ms @=1.0s	I_{FSM}	2.5 0.5			A
Repetitive peak forward current	I_{FRM}	625			mA
Power dissipation	Pd	250			mW
Thermal resistance junction to ambient	$R_{\Theta JA}$	500			K/W
Storage temperature	T_{STG}	-65 to +150			℃
Non-Repetitive peak reverse voltage	V_{RM}	120	200	250	V

Electrical ratings @T_A=25℃

PARAMETER		SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage		V_{F1}			1.0	V	I_F=0.1A
		V_{F2}			1.25	V	I_F=0.2A
Reverse current	BAV19W	I_R			0.1	uA	V_R=100V
	BAV20W				0.1	uA	V_R=150V
	BAV21W				0.1	uA	V_R=200V
Capacitance between terminals		C_T			5	pF	V_R=0V,f=1.0MHz
Reverse recovery time		t_{rr}			50	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

RATINGS AND CHARACTERISTIC CURVES BAV19W THRU BAV21W

FIG. 1- POWER DERATING CURVE

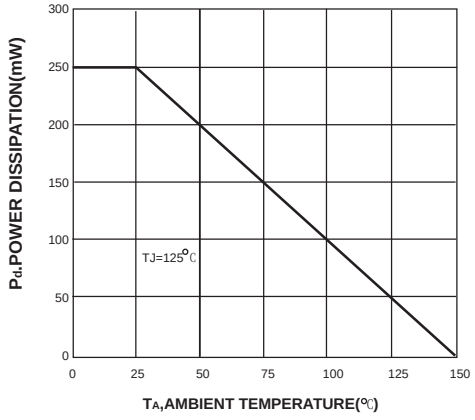


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

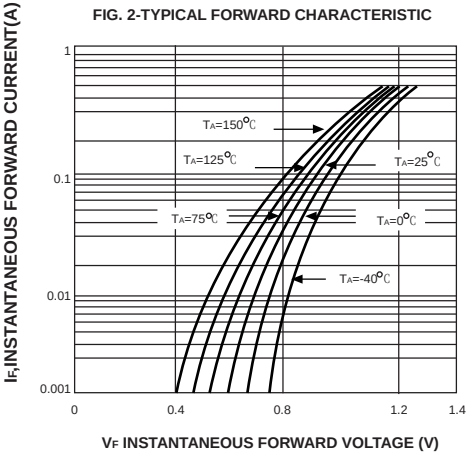


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

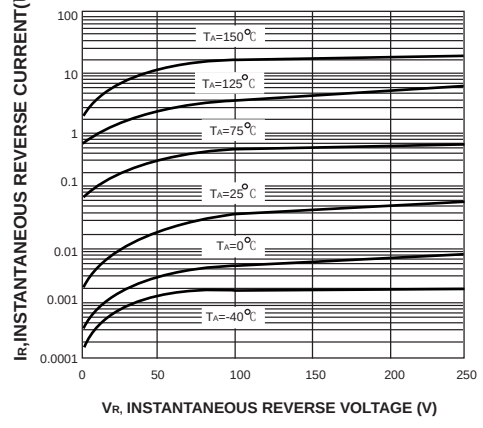
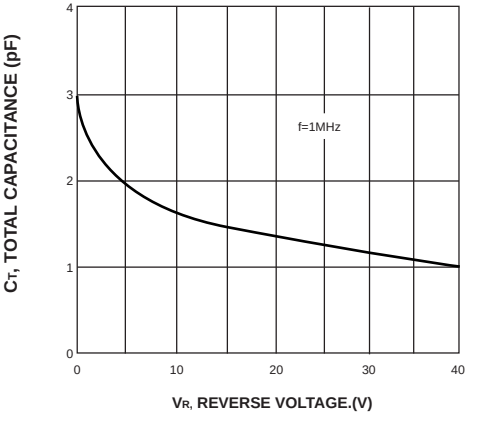


FIG. 4- TYPICAL CAPACITANCE VS REVERSE VOLTAGE



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