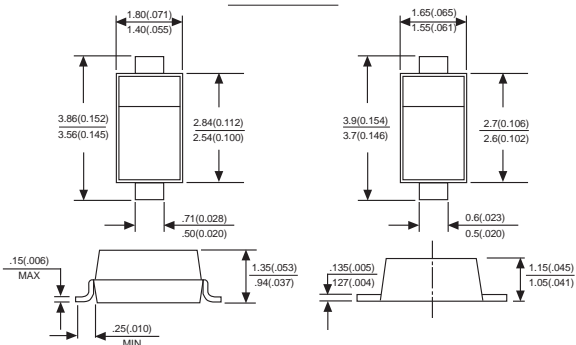




BAV19W-BAV21W

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°C

PARAMETER	SYMBOLS	BAV19W	BAV20W	BAV21W	UNITS
Peak repetitive peak reverse voltage	V _{RRM}				
Working peak reverse voltage	V _{RWM}	100	150	200	V
DC Blocking voltage	V _R				
RMS Reverse voltage	V _{R(RMS)}	71	106	141	V
Forward continuous current	I _{FM}		400		mA
Average rectified output current	I _o		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	P _d		250		mW
Thermal resistance junction to ambient	R _{θJA}		500		K/W
Storage temperature	T _{STG}		-65 to +150		°C
Non-Repetitive peak reverse voltage	V _{RM}	120	200	250	V

Electrical ratings @T_A=25°C

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	I _R			0.1	μA	V _R =100V
				0.1	μA	V _R =150V
				0.1	μA	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 I _{rr} =0.1X I _R , R _L =100Ω

RATINGS AND CHARACTERISTIC CURVES BAV19W THRU BAV21W

FIG. 1- POWER DERATING CURVE

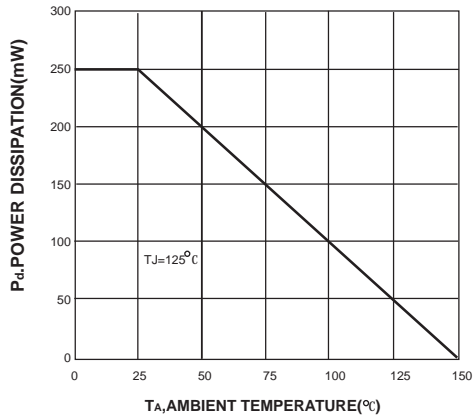


FIG. 2-TYPICAL FORWARD CHARACTERISTIC

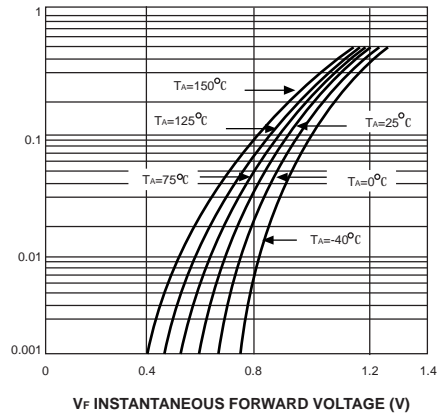


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

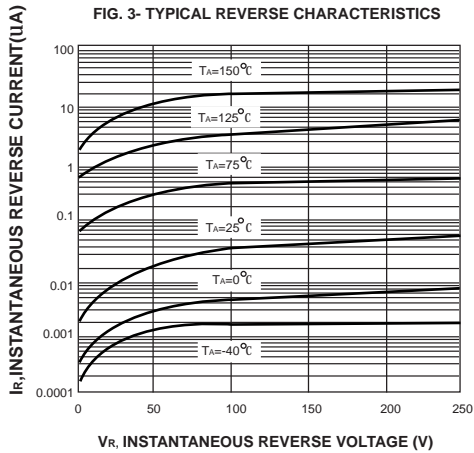


FIG. 4- TYPICAL CAPACITANCE VS REVERSE VOLTAGE

