



## SOT-523 Plastic-Encapsulate Diodes

### BAS16T/BAW56T/BAV70T/BAV99T

SWITCHING DIODE

#### FEATURES

Power dissipation

$$P_D: 150 \text{ mW (} T_{amb}=25^\circ\text{C)}$$

Forward Current

$$I_F: 75 \text{ mA}$$

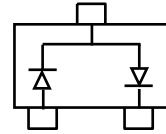
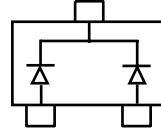
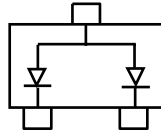
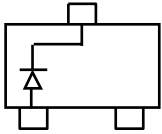
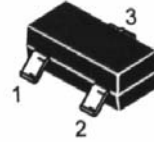
Reverse Voltage

$$V_R: 85 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

SOT-523



BAS16T Marking: A2

BAW56T Marking: JD

BAV70T Marking: JJ

BAV99T Marking: JE

#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	85		V
Reverse voltage leakage current	$I_{R1}$	$V_R=75\text{V}$		2	$\mu\text{A}$
	$I_{R2}$	$V_R=25\text{V}$		0.03	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$		715 855 1000 1250	mV
Diode capacitance	$C_D$	$V_R=0\text{V}, f=1\text{MHz}$		1.5	pF
Reverse recovery time	$t_{rr}$			4	nS

# Typical Characteristics

# BAS16T/BAW56T/BAV70T/BAV99T

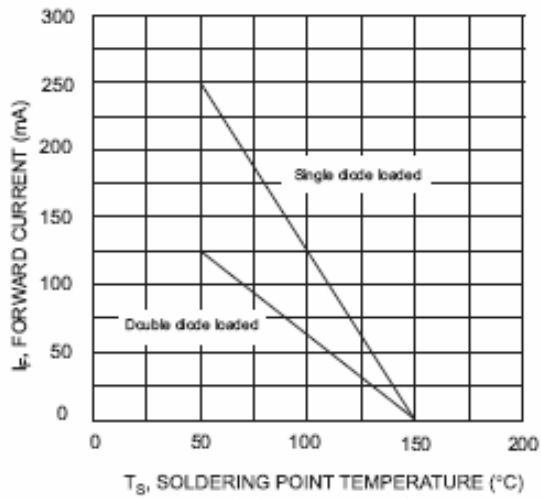


Fig. 1 Current Derating Curve

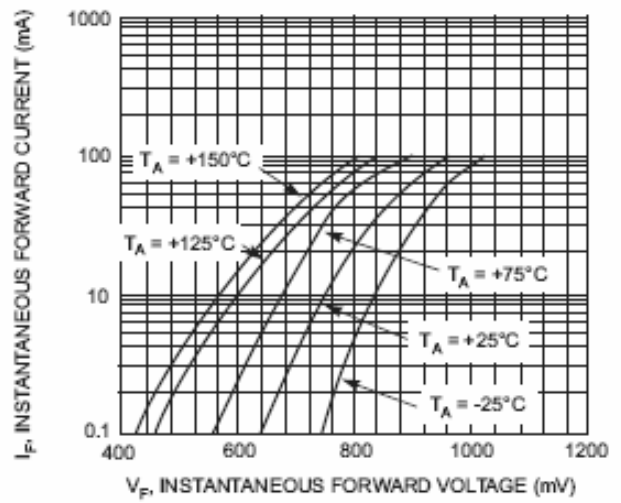


Fig. 2, Typical Forward Characteristics

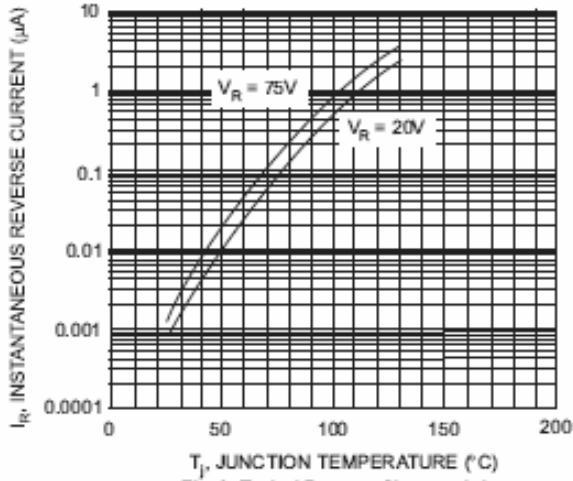


Fig. 3, Typical Reverse Characteristics