

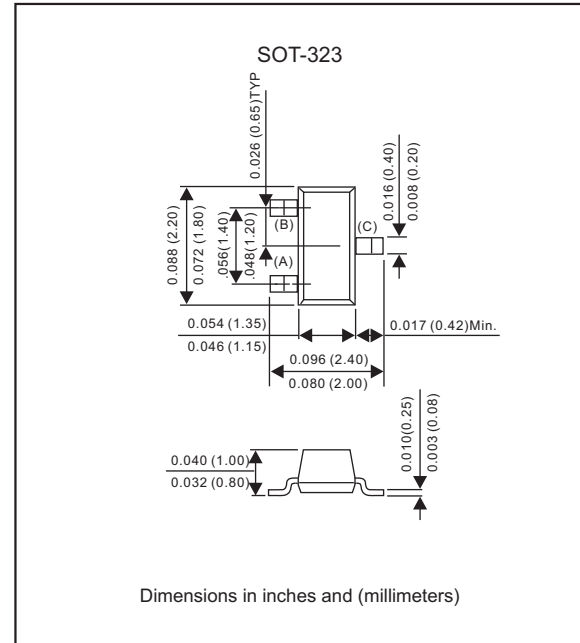
### Features

- Fast speed switching.
- For general purpose switching application.
- High conductance.
- Silicon epitaxial planar chip.
- Lead-free parts meet RoHS requirements.
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

### Package outline

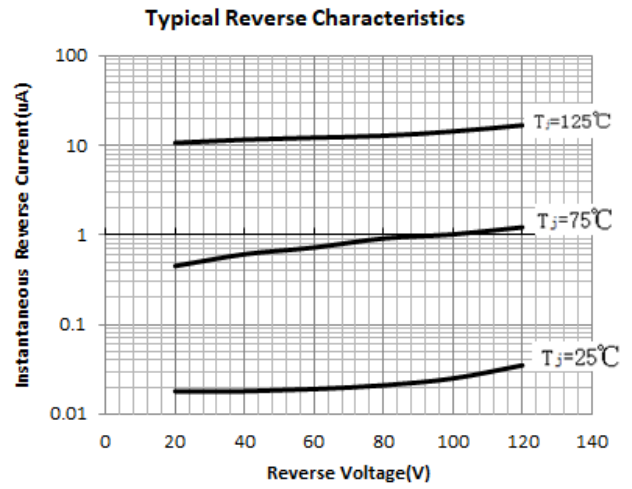
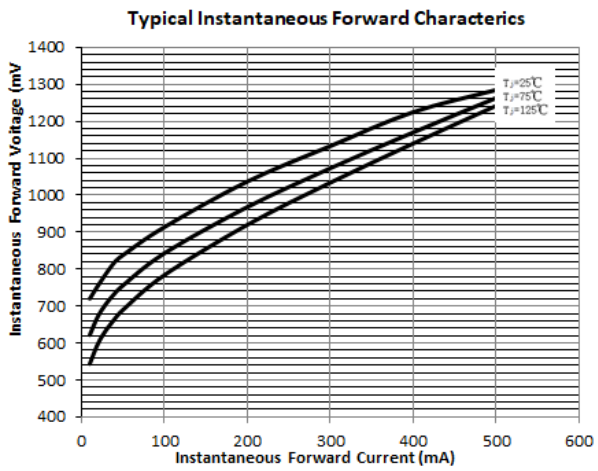


### Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

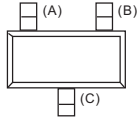
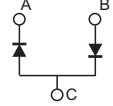
Item	Symbol	Unit	Value
Peak Reverse Voltage	$V_{RRM}$	V	100
Reverse Voltage	$V_R$	V	75
Peak Forward Current	$I_{FAV}$	mA	150
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	$^\circ\text{C}/\text{W}$	625
Operation Junction Temperature	$T_J$	$^\circ\text{C}$	-55 to +150
Storage Temperature	$T_{STG}$	$^\circ\text{C}$	-55 to +150

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	$V_R$	V	$I_R=100\mu\text{A}$	75
Maximum Instantaneous Forward Voltage	$V_F$	V	$I_F=1\text{mA}$	0.715
			$I_F=10\text{mA}$	0.855
			$I_F=50\text{mA}$	1.0
			$I_F=150\text{mA}$	1.25
Maximum DC Reverse Current	$I_R$	$\mu\text{A}$	$V_R=75\text{V}$	2.5
Typical Junction Capacitance	$C_J$	pF	$f=1.0\text{MHz}$ , $V_R=0\text{V}$	2
Reverse Recovery Time	$T_{rr}$	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \cdot I_R$ , $R_L=100\Omega$	4

## Rating and characteristic curves for each diode

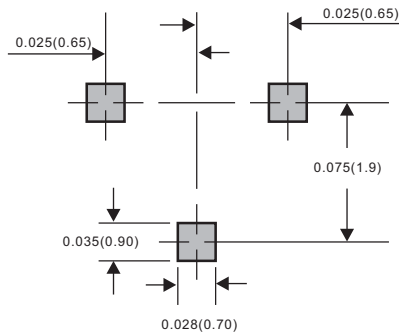


## Pinning information

Type number	Marking code	Simplified outline	Symbol
BAV99W-Q1	KJG		

## Suggested solder pad layout

SOT-323



Dimensions in inches and (millimeters)