

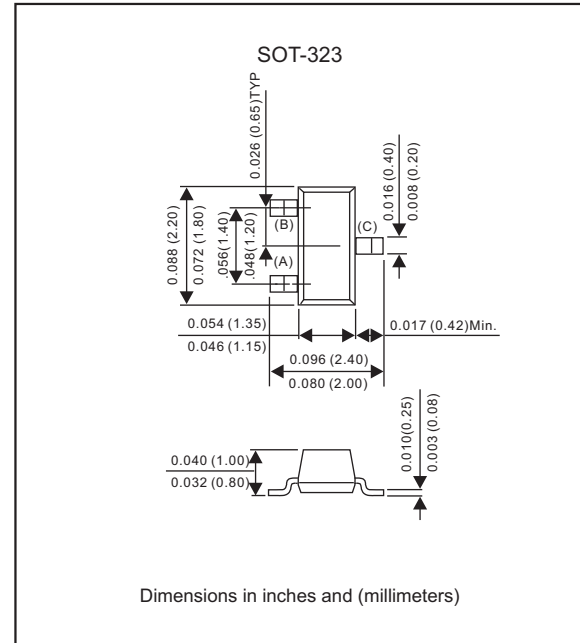
Features

- 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

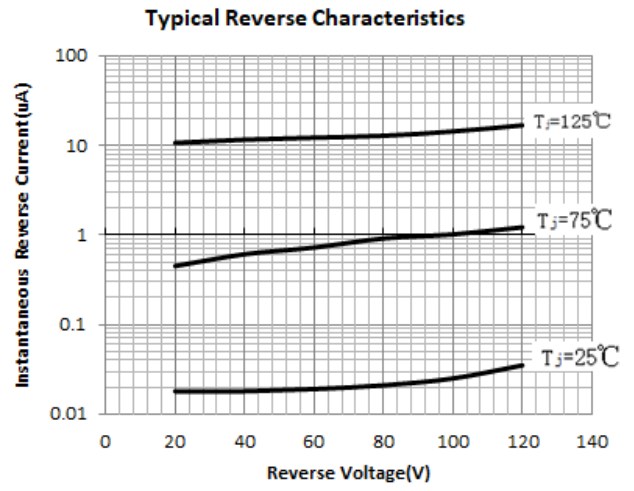
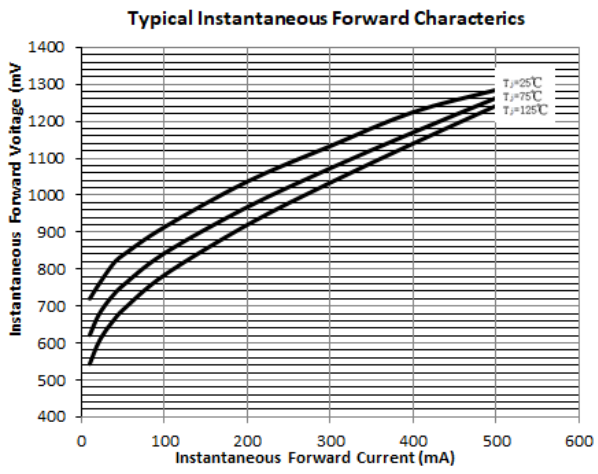


Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

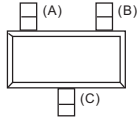
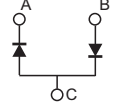
Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RRM}	V	100
Reverse Voltage	V_R	V	75
Peak Forward Current	I_{FAV}	mA	150
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	625
Operation Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +150
Storage Temperature	T_{STG}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

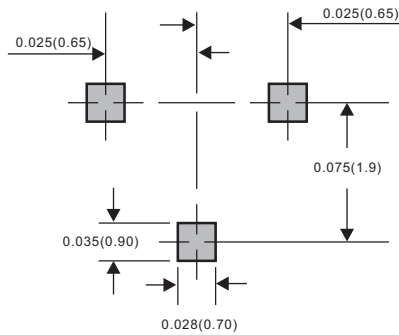


Pinning information

Type number	Marking code	Simplified outline	Symbol
BAV99W-Q1	KJG		

Suggested solder pad layout

SOT-323



Dimensions in inches and (millimeters)