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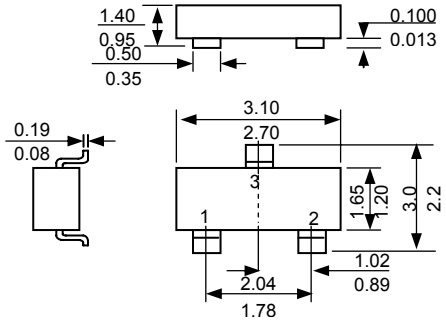
BAV23/SE/CC/CA

SURFACE MOUNT SWITCHING DIODES

PRV : 250 Volts
Io : 400 mA

SOT-23



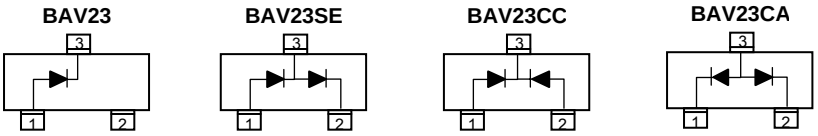
Dimensions in millimeters

FEATURES :

* Small plastic SMD package
* Fast switching
* Repetitive peak reverse voltage : max. 250 V
* Pb / RoHS Free

MECHANICAL DATA :

* Case : SOT-23 plastic Case
* BAV23SE Marking Code : PY
* BAV23CC Marking Code : PZ
* BAV23CA Marking Code : RA



ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Reverse Voltage	V_R	200	V
Forward Current	I_F	400	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at t = 1 µs	I_{FSM}	9	A
at t = 100 µs		3	A
at t = 10 ms		1.7	A
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\Theta JA}$	357	°C/W
Operating Junction and Storage Temperature Range	T_J , T_{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I_R = 100 µA	$V_{(BR)}$	250	-	-	V
Leakage Current	V_R = 200 V, Tj = 25 °C	I_R	-	-	100	nA
	V_R = 200 V, Tj = 150 °C		-	-	100	µA
Forward Voltage	I_F = 100 mA	V_F	-	-	1.00	V
	I_F = 200 mA		-	-	1.25	
Diode Capacitance	V_R = 1 V, f = 1 MHz	C_T	-	-	5	pF
Reverse Recovery Time	I_F = I_R = 30 mA, Irr = 1A x I_R , R_L = 100 Ω	Trr	-	-	50	ns

RATINGS AND CHARACTERISTIC CURVES (BAV23/SE/CC/CA)

FIG.1 - TYPICAL FORWARD CHARACTERISTICS

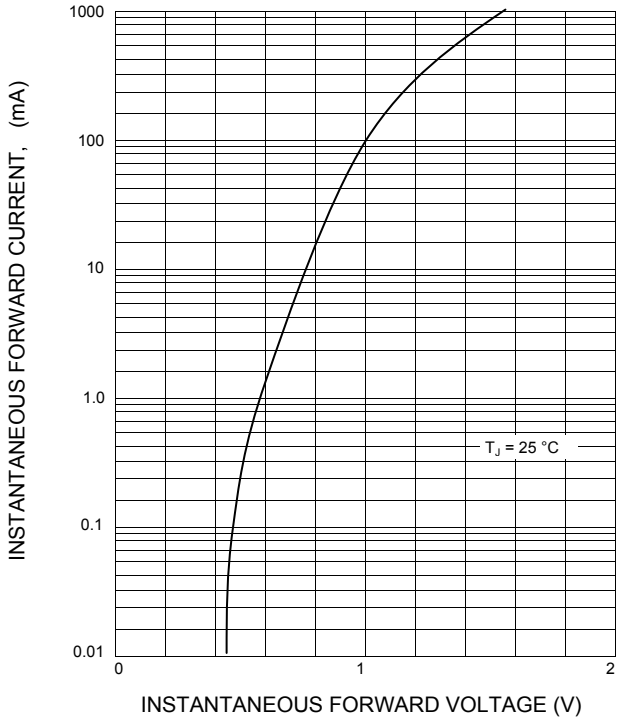


FIG.2 - LEAKAGE CURRENT VS. JUNCTION TEMPERATURE