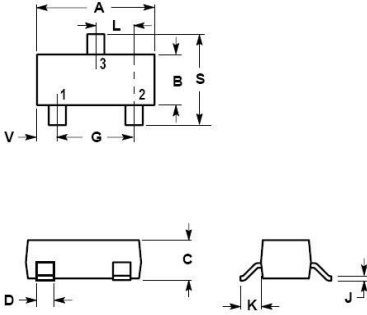


SURFACE MOUNT FAST SWITCHING DIODE	REVERSE VOLTAGE – 70 Volts FORWARD CURRENT – 0.2 Ampere																																				
<p>FEATURES</p> <ul style="list-style-type: none"> • Fast Switching Speed • Ideally Suited for Automatic Insertion • For general purpose switching applications <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: SOT-23 Plastic • Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl) • Moisture Sensitivity: Level 1 per J-STD-020D • Lead Free in RoHS 2002/95/EC Compliant 	<p style="text-align: center;">SOT-23</p> <div style="display: flex; align-items: center; justify-content: center;">  <table border="1" style="margin-left: 20px; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3">SOT-23</th> </tr> <tr> <th>Dim.</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr><td>A</td><td>2.80</td><td>3.04</td></tr> <tr><td>B</td><td>1.20</td><td>1.40</td></tr> <tr><td>C</td><td>0.89</td><td>1.11</td></tr> <tr><td>D</td><td>0.37</td><td>0.50</td></tr> <tr><td>G</td><td>1.78</td><td>2.04</td></tr> <tr><td>J</td><td>0.085</td><td>0.177</td></tr> <tr><td>K</td><td>0.35</td><td>0.69</td></tr> <tr><td>L</td><td>0.89</td><td>1.02</td></tr> <tr><td>S</td><td>2.10</td><td>2.64</td></tr> <tr><td>V</td><td>0.45</td><td>0.60</td></tr> </tbody> </table> </div> <p style="text-align: center; font-size: small;">Dimensions in millimeter</p>	SOT-23			Dim.	Min.	Max.	A	2.80	3.04	B	1.20	1.40	C	0.89	1.11	D	0.37	0.50	G	1.78	2.04	J	0.085	0.177	K	0.35	0.69	L	0.89	1.02	S	2.10	2.64	V	0.45	0.60
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Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAW56	Units
Non-Repetitive Peak Reverse Voltage DC Blocking Voltage	V _{RM} V _R	70	V
Forward Current	I _F	200	mA
Peak Forward Surge Current @t=10ms	I _{FSM}	500	mA
Power Dissipation	P _D	225	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	556	°C/W
Operating Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I _R = 100uA	V _{BR}	70	--	--	V
Maximum Forward Voltage	I _F = 1mA I _F = 10mA I _F = 50mA I _F = 150mA	V _F	--	--	715 855 1000 1250	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 75V	I _R	--	--	2.5	uA
Typical Diode Capacitance	V _R = 1V, f=1MHz	C _D	--	--	1.5	pF
Reverse Recovery time	I _{rr} =1mA, I _F =I _R =10mA, R _L =100Ω	t _{rr}	--	--	6	nS

RATING AND CHARACTERISTIC CURVES BAW56



Fig.1 Typical Forward Characteristics

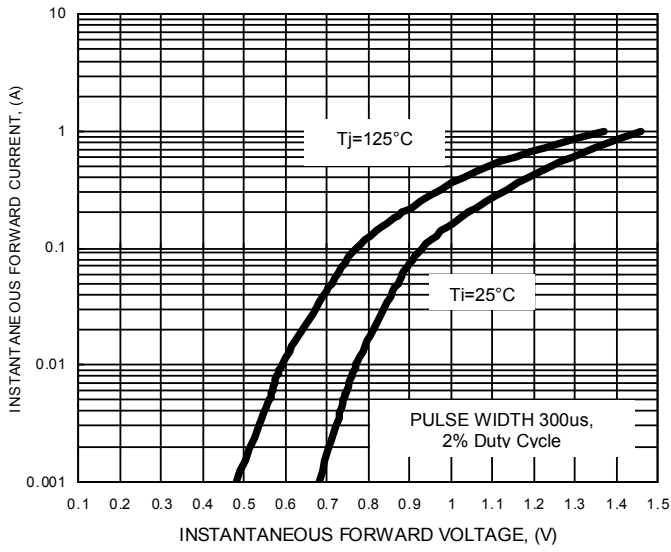


Fig.2 Typical Reverse Characteristics

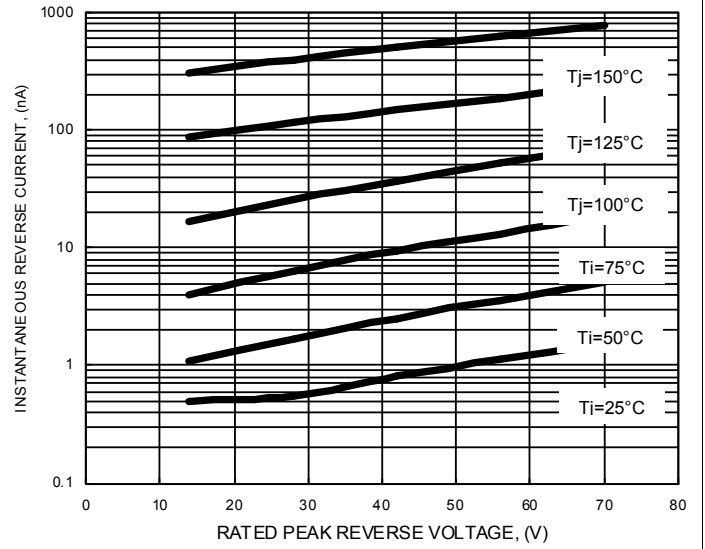
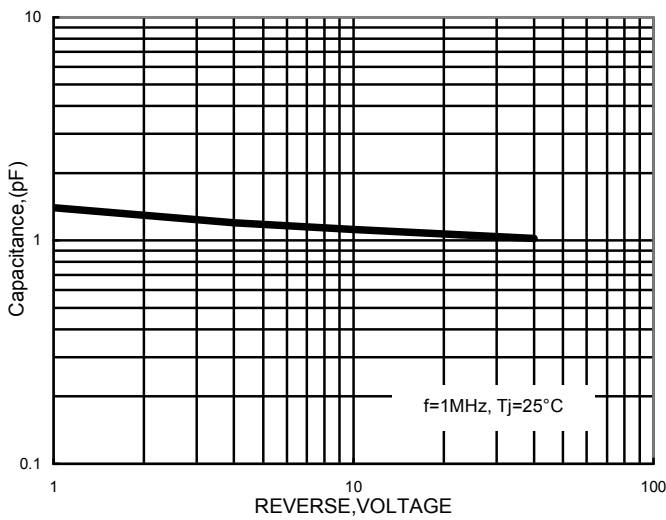


Fig.3 Total Capacitance vs. Reverse Voltage



Device Marking:

Device P/N	Marking	Equivalent Circuit Diagram
BAW56	A1	

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