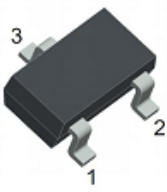
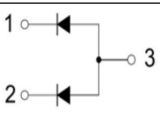
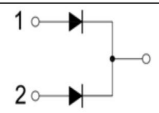
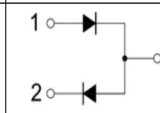
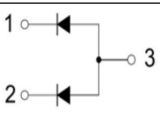
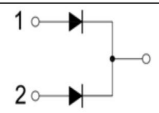
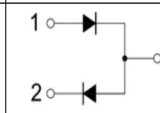
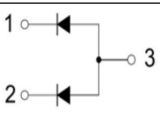
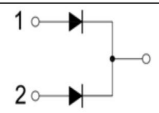
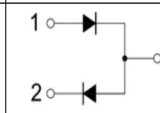
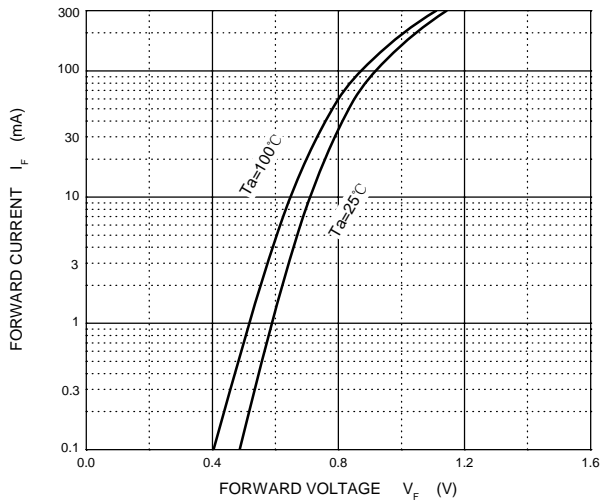


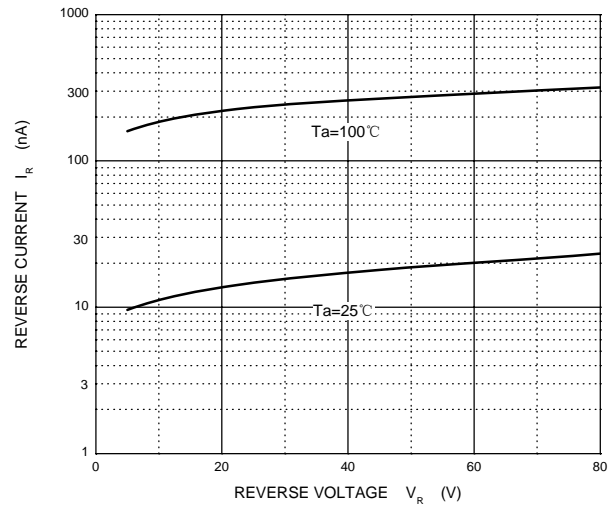
Switching Diodes	SOT-23 Plastic-Encapsulate Diodes																																																																																												
<p><u>SOT-23</u></p>  <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 33%;">BAW56</th> <th style="width: 33%;">BAV70</th> <th style="width: 33%;">BAV99</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> </tr> <tr> <td style="text-align: center;">MARKING:A1</td> <td style="text-align: center;">MARKING:A4</td> <td style="text-align: center;">MARKING:A7</td> </tr> </tbody> </table>	BAW56	BAV70	BAV99				MARKING:A1	MARKING:A4	MARKING:A7	<p><b>Features</b></p> <ul style="list-style-type: none"> <li>● High Conductance</li> <li>● Fast Switching Speed</li> <li>● For General Purpose Switching Applications</li> </ul>																																																																																			
BAW56	BAV70	BAV99																																																																																											
																																																																																													
MARKING:A1	MARKING:A4	MARKING:A7																																																																																											
<p><b>Solid dot = Green molding compound device, if none, the normal device.</b></p> <p><b>Maximum ratings (@Ta=25°C)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Parameter</th> <th style="width: 15%;">Symbol</th> <th style="width: 15%;">Limit</th> <th style="width: 10%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Reverse Voltage</td> <td>VR</td> <td>70</td> <td>V</td> </tr> <tr> <td>Forward Current</td> <td>IF</td> <td>200</td> <td>mA</td> </tr> <tr> <td>Non-Repetitive Peak Forward Surge Current @t=8.3ms</td> <td>IFSM</td> <td>2.0</td> <td>A</td> </tr> <tr> <td>Power Dissipation</td> <td>PD</td> <td>225</td> <td>mW</td> </tr> <tr> <td>Thermal Resistance from Junction to Ambient</td> <td>RθJA</td> <td>556</td> <td>°C/W</td> </tr> <tr> <td>Junction Temperature</td> <td>TJ</td> <td>150</td> <td>°C</td> </tr> <tr> <td>Storage Temperature Range</td> <td>TSTG</td> <td>-55~+150</td> <td>°C</td> </tr> </tbody> </table> <p><b>Electrical Characteristics (@Ta=25°C)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Parameter</th> <th style="width: 10%;">Symbol</th> <th style="width: 25%;">Test Condition</th> <th style="width: 5%;">Min</th> <th style="width: 5%;">Typ</th> <th style="width: 5%;">Max</th> <th style="width: 5%;">Unit</th> </tr> </thead> <tbody> <tr> <td>Reverse breakdown voltage</td> <td>V(BR)</td> <td>IR=100μA</td> <td>70</td> <td></td> <td></td> <td>V</td> </tr> <tr> <td rowspan="4">Forward voltage</td> <td>VF1</td> <td>IF=1mA</td> <td></td> <td>0.57</td> <td>0.715</td> <td>V</td> </tr> <tr> <td>VF2</td> <td>IF=10mA</td> <td></td> <td>0.714</td> <td>0.855</td> <td>V</td> </tr> <tr> <td>VF3</td> <td>IF=50mA</td> <td></td> <td>0.83</td> <td>1</td> <td>V</td> </tr> <tr> <td>VF4</td> <td>IF=150mA</td> <td></td> <td>0.97</td> <td>1.25</td> <td>V</td> </tr> <tr> <td>Reverse current</td> <td>IR</td> <td>VR=70V</td> <td></td> <td></td> <td>2.5</td> <td>uA</td> </tr> <tr> <td>capacitance Between terminals</td> <td>Ctot</td> <td>VR=0V, f=1MHz</td> <td></td> <td></td> <td>1.5</td> <td>PF</td> </tr> <tr> <td>Reverse recovery time</td> <td>t<sub>rr</sub></td> <td>IF=IR=10mA, Irr=0.1×IR, RL= 100 Ω</td> <td></td> <td></td> <td>6</td> <td>nS</td> </tr> </tbody> </table>		Parameter	Symbol	Limit	Unit	Reverse Voltage	VR	70	V	Forward Current	IF	200	mA	Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A	Power Dissipation	PD	225	mW	Thermal Resistance from Junction to Ambient	RθJA	556	°C/W	Junction Temperature	TJ	150	°C	Storage Temperature Range	TSTG	-55~+150	°C	Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	Reverse breakdown voltage	V(BR)	IR=100μA	70			V	Forward voltage	VF1	IF=1mA		0.57	0.715	V	VF2	IF=10mA		0.714	0.855	V	VF3	IF=50mA		0.83	1	V	VF4	IF=150mA		0.97	1.25	V	Reverse current	IR	VR=70V			2.5	uA	capacitance Between terminals	Ctot	VR=0V, f=1MHz			1.5	PF	Reverse recovery time	t <sub>rr</sub>	IF=IR=10mA, Irr=0.1×IR, RL= 100 Ω			6	nS
Parameter	Symbol	Limit	Unit																																																																																										
Reverse Voltage	VR	70	V																																																																																										
Forward Current	IF	200	mA																																																																																										
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A																																																																																										
Power Dissipation	PD	225	mW																																																																																										
Thermal Resistance from Junction to Ambient	RθJA	556	°C/W																																																																																										
Junction Temperature	TJ	150	°C																																																																																										
Storage Temperature Range	TSTG	-55~+150	°C																																																																																										
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit																																																																																							
Reverse breakdown voltage	V(BR)	IR=100μA	70			V																																																																																							
Forward voltage	VF1	IF=1mA		0.57	0.715	V																																																																																							
	VF2	IF=10mA		0.714	0.855	V																																																																																							
	VF3	IF=50mA		0.83	1	V																																																																																							
	VF4	IF=150mA		0.97	1.25	V																																																																																							
Reverse current	IR	VR=70V			2.5	uA																																																																																							
capacitance Between terminals	Ctot	VR=0V, f=1MHz			1.5	PF																																																																																							
Reverse recovery time	t <sub>rr</sub>	IF=IR=10mA, Irr=0.1×IR, RL= 100 Ω			6	nS																																																																																							

## Typical Characteristics

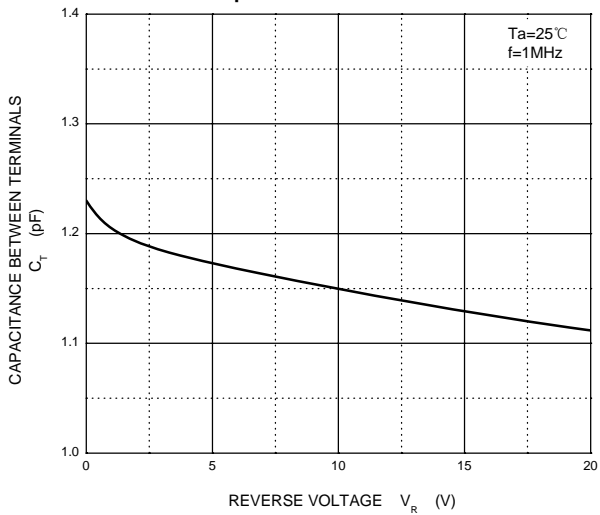
### Forward Characteristics



### Reverse Characteristics



### Capacitance Characteristics



### Power Derating Curve

