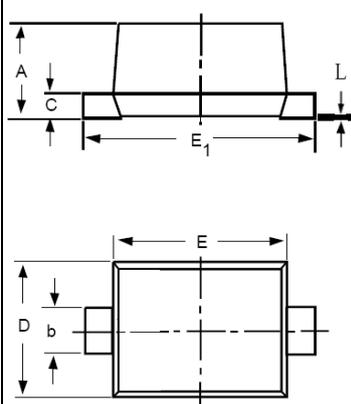


<b>SURFACE MOUNT SCHOTTKY BARRIER DIODE</b>	<b>REVERSE VOLTAGE – 40 Volts FORWARD CURRENT – 0.1 Ampere</b>																											
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>Extremely Fast Switching Speed</li> <li>Low Forward Voltage</li> <li>Very Small Conduction Losses</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>Case: SOD-523 Plastic</li> <li>Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)</li> <li>Moisture Sensitivity: Level 1 per J-STD-020D</li> <li>Lead Free in RoHS 2002/95/EC Compliant</li> </ul>	<p style="text-align: center;"><b>SOD-523</b></p>  <table border="1" style="float: right;"> <thead> <tr> <th colspan="3">SOD-523</th> </tr> <tr> <th>Dim.</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0.51</td> <td>0.77</td> </tr> <tr> <td>b</td> <td>0.25</td> <td>0.35</td> </tr> <tr> <td>C</td> <td>0.08</td> <td>0.15</td> </tr> <tr> <td>D</td> <td>0.75</td> <td>0.85</td> </tr> <tr> <td>E</td> <td>1.10</td> <td>1.30</td> </tr> <tr> <td>E1</td> <td>1.50</td> <td>1.70</td> </tr> <tr> <td>L</td> <td>0.01</td> <td>0.07</td> </tr> </tbody> </table> <p style="text-align: center;">Dimensions in millimeter</p>	SOD-523			Dim.	Min.	Max.	A	0.51	0.77	b	0.25	0.35	C	0.08	0.15	D	0.75	0.85	E	1.10	1.30	E1	1.50	1.70	L	0.01	0.07
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**Maximum Ratings & Thermal Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified**

Characteristic	Symbol	1SS388	Units
Peak Reverse Voltage	V <sub>RRM</sub>	45	V
DC Reverse Voltage	V <sub>R</sub>	40	
Maximum Forward Current	I <sub>FM</sub>	300	mA
Average Forward Current	I <sub>O</sub>	100	mA
Peak Forward Surge Current@<10ms	I <sub>FSM</sub>	1000	mA
Power Dissipation	P <sub>D</sub>	150	mW
Operating Temperature Range	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+125	°C

**Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified**

Characteristic	Test Condition	Symbol	1SS388	Unit
Maximum Forward Voltage	I <sub>F</sub> = 50mA	V <sub>F</sub>	600	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V <sub>R</sub> = 10V	I <sub>R</sub>	5	uA
Total Capacitance	V <sub>R</sub> = 0V, f = 1MHz	C <sub>T</sub>	25	pF

REV. 1, Oct-2010, KSHR04

# RATING AND CHARACTERISTIC CURVES

## 1SS388



FIG.1- TYPICAL FORWARD CHARACTERISTICS

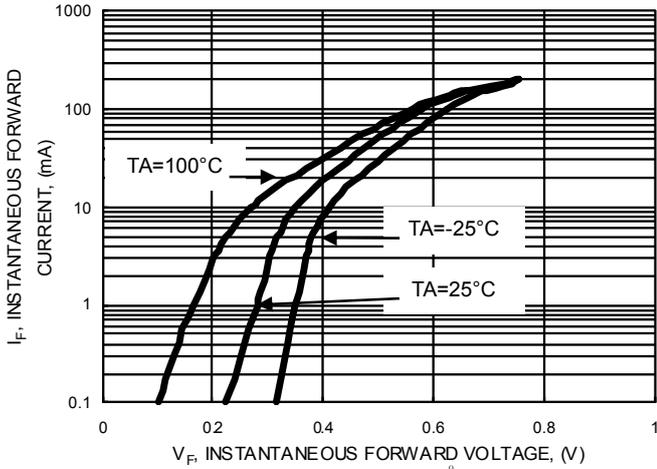


FIG.2- TYPICAL REVERSE CHARACTERISTICS

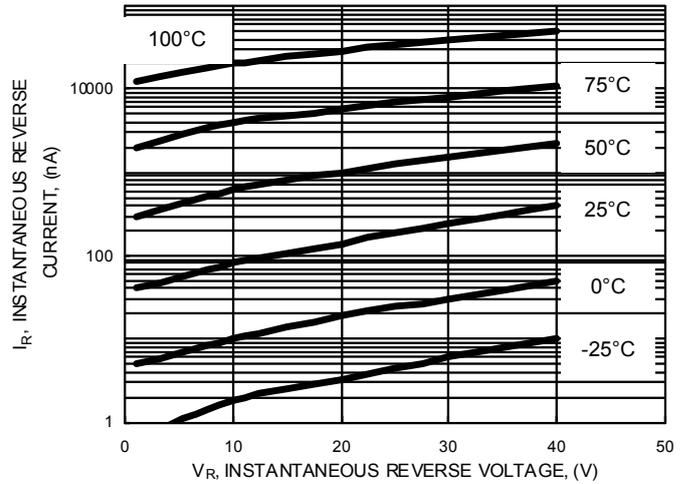


FIG.3- TYPICAL JUNCTION CAPACITANCE

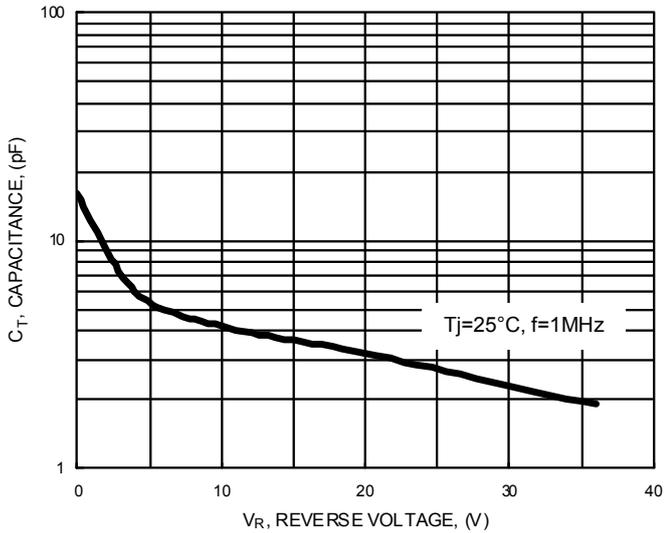
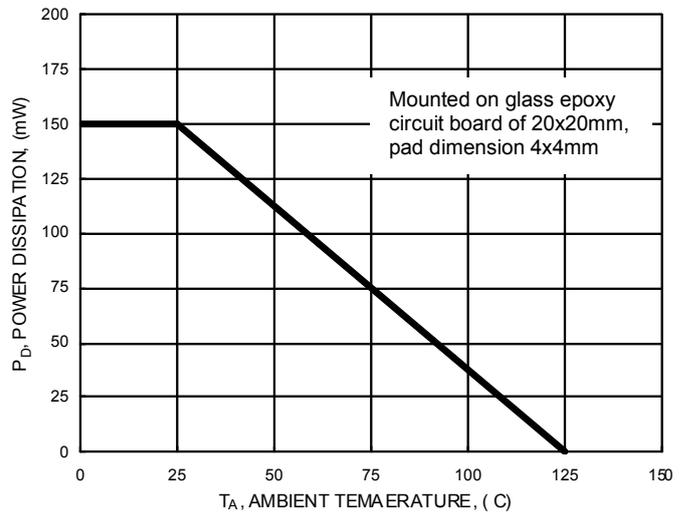


FIG.4- POWER DERATING CURVE



### Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
1SS388	S3	

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