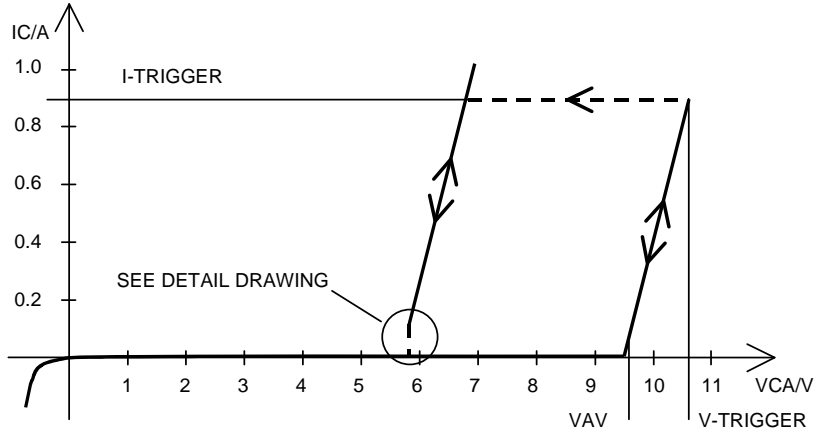
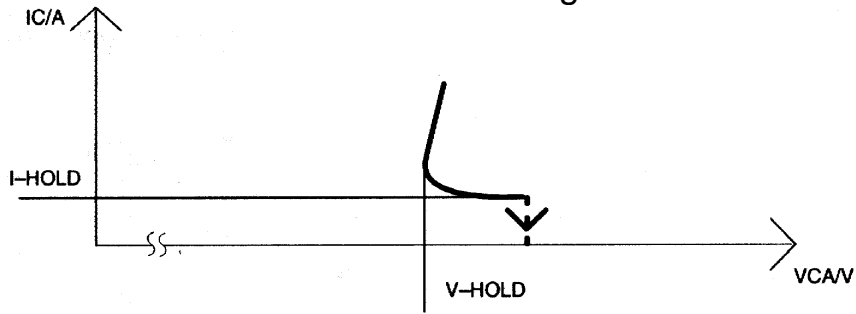


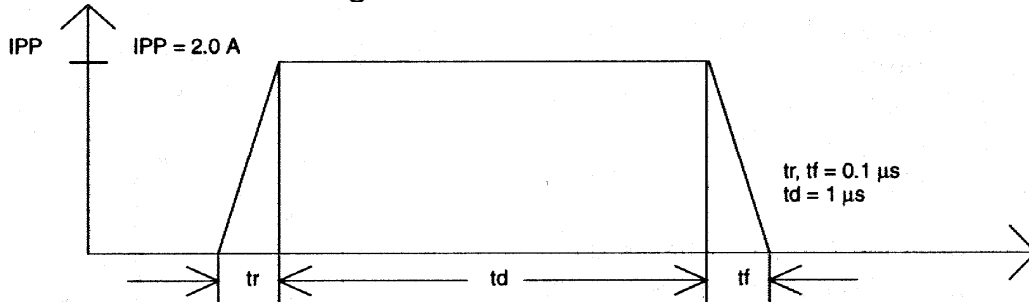
**DC CHARACTERISTICS Figure 1**



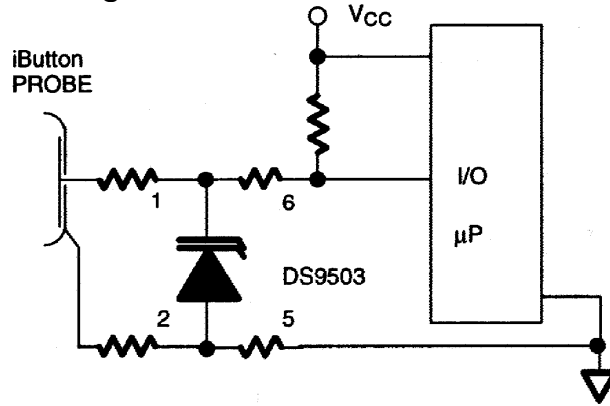
**DC CHARACTERISTICS DETAIL DRAWING Figure 2**



**TEST PULSE WAVEFORM Figure 3**



**TYPICAL APPLICATION Figure 4**



**ABSOLUTE MAXIMUM RATINGS\***

|                                       |                      |
|---------------------------------------|----------------------|
| Operating Temperature                 | -40°C to +85°C       |
| Storage Temperature                   | -55°C to +125°C      |
| Soldering Temperature                 | 260°C for 10 seconds |
| Continuous DC Current Through Package | 80 mA                |

\* This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operation sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods of time may affect reliability

**ELECTRICAL CHARACTERISTICS**

(-40°C to +85°C)

| PARAMETER                        | SYMBOL        | MIN | TYP  | MAX   | UNITS    | NOTES |
|----------------------------------|---------------|-----|------|-------|----------|-------|
| Leakage Current                  | $I_L$         |     | 30   | 100   | nA       | 1     |
| Avalanche Voltage                | $V_{AV}$      | 7.4 |      | 11.05 | V        | 2,3   |
| Trigger Voltage                  | $V_{TRIGGER}$ |     | 10   | 11    | V        | 2,4   |
| Trigger Current                  | $I_{TRIGGER}$ |     |      | 1000  | mA       | 4     |
| Holding Voltage                  | $V_{HOLD}$    | 5.5 |      |       | V        | 2,4   |
| Holding Current                  | $I_{HOLD}$    | 11  |      |       | mA       | 4     |
| Forward Voltage (-10 mA)         | $V_F$         |     | -0.7 | -0.8  | V        | 5     |
| Forward Current (-0.7V)          | $I_F$         |     | -10  | -100  | mA       | 5     |
| Maximum Peak Current             | $I_{PP}$      |     | 2.0  |       | A        | 6     |
| Continuous Current Through Diode | $I_{CC}$      |     |      | ±80   | mA       |       |
| Isolation Resistance             | $R_I$         |     | 5    |       | $\Omega$ |       |

**CAPACITANCE**(t<sub>A</sub>=25°C)

| PARAMETER                 | SYMBOL   | MIN | TYP | MAX | UNITS | NOTES |
|---------------------------|----------|-----|-----|-----|-------|-------|
| Junction Capacitance (5V) | $C_{J5}$ |     | 40  |     | pF    | 2     |
| Junction Capacitance (0V) | $C_{J0}$ |     | 70  |     | pF    | 2     |

**THERMAL RESISTANCE**

| PARAMETER           | SYMBOL          | MIN | TYP | MAX | UNITS | NOTES |
|---------------------|-----------------|-----|-----|-----|-------|-------|
| Junction To Package | $R_{\theta JC}$ |     |     | 75  | K/W   |       |
| Junction To Ambient | $R_{\theta JA}$ |     |     | 200 | K/W   |       |

**NOTES:**

1. At 7.0V.
2. All voltages are referenced from Cathode to Anode.
3. At 0.3  $\mu$ A.
4. Not production tested, guaranteed by design.
5. Typical values at room temperature.
6. See pulse specification.

**REVISION HISTORY**

| REVISION DATE | DESCRIPTION  | PAGES CHANGED |
|---------------|--|---------------|
|               | Added "lead-free" note to the <i>Ordering Information</i> table.   | 1             |
|               | Fixed the X/Y scale in Figure 1.   | 2             |
| 072209        | In the <i>Electrical Characteristics</i> table, changed the $V_{AV}$ specification maximum value to 11V; the $V_{TRIGGER}$ specification typical value to 10V and maximum value to 11V; the $I_{TRIGGER}$ specification typical value to a blank; and the $I_{HOLD}$ specification minimum value to an 11mA. | 3             |
|               | Added note 4 ("Not production tested, guaranteed by design") to the $V_{TRIGGER}$ , $I_{TRIGGER}$ , $V_{HOLD}$ , and $I_{HOLD}$ specifications in the <i>Electrical Characteristics</i> table.   | 3             |

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