

ESD Protection Diodes

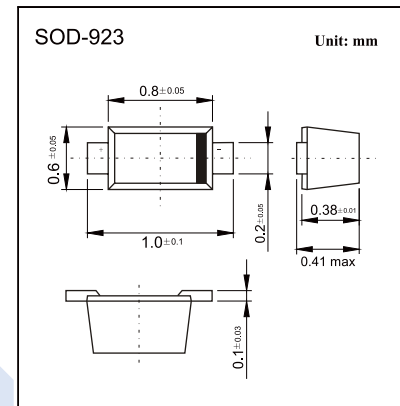
ESD9C5.0ST5G

■ Features

- Low Leakage
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- Stand-off Voltage: 5 V
- IEC61000-4-2 Level 4 ESD Protection



PIN 1. CATHODE
2. ANODE

■ Absolute Maximum Ratings $T_a = 25$

Parameter	Symbol	Value	Unit
Clamping Voltage @ I_{PP}	V_C	5.0	V
Working Peak Reverse Voltage	V_{RWM}	5.0	V
Breakdown Voltage @ I_T	V_{BR}	11.0	V
Forward Voltage @ I_F	V_F	1.1	V
Forward Current	I_F	10	mA
Test Current	I_T	1.0	mA
Maximum Reverse Leakage Current @ V_{RWM}	I_R	0.5	uA
Total Power Dissipation on FR-5 Board @ $T_A = 25^\circ\text{C}$	P_D	150	mW
Peak Power Dissipation	P_{pk}	150	W
Max. Capacitance @ $V_R = 0$ and $f = 1$ MHz	C	6.2	pF
Lead Solder Temperature – Maximum (10 Second Duration)	T_L	260	$^\circ\text{C}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

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Electrical Characteristics $T_a = 25\text{ }^\circ\text{C}$

Device	Device Marking	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T *1	I_T	C (pF) *2	C (pF) *2
		Max	Max	Min	mA	Typ	Max
ESD9C5.0ST5G	P	5.0	0.5	11.0	1.0	6.0	6.2

*1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of $25\text{ }^\circ\text{C}$.

*2. Capacitance at $f = 1\text{ MHz}$, $V_R = 0\text{ V}$, $T_A = 25\text{ }^\circ\text{C}$.

Marking

Marking	P
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Typical Characteristics

