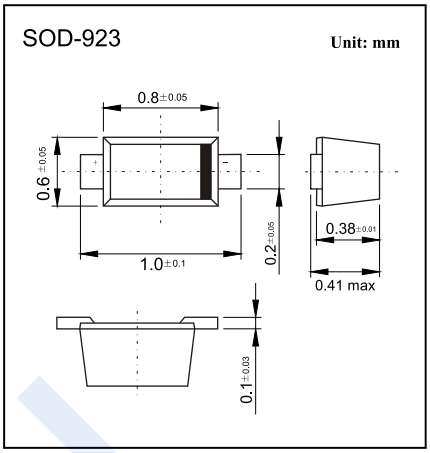
ESD Protection Diodes

ESD9B5V



■ Features

- Low Leakage
- Fast Response Time < 1 ns
- Protects One Power or I/O Port
- ESD Rating of Class 3 (>16KV) per Human Body Model

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
IEC 61000-4-2 (ESD) Contact		±8	KV
IEC 61000-4-2 (EFT)		40	A
Power Dissipation (Note 1)	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	400	℃/W
Lead Solder Temperature - Maximum (10 Second Duration)	T_L	260	℃
Junction Temperature	T_J	150	
Storage Temperature range	T_{stg}	-55 to 150	

Note.1:FR-5 = 1.0*0.75*0.62 in.

■ Electrical Characteristics Ta = 25℃

Device	Device Marking	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)		I_T(mA)	C (pF)
		Max	Max	Min	Max		Max
ESD9B5V		5.0	1.0	5.8	7.8	1.0	15

Note.1. V_{BR} is measured with a pulse test current IT at an ambient temperature of 25℃

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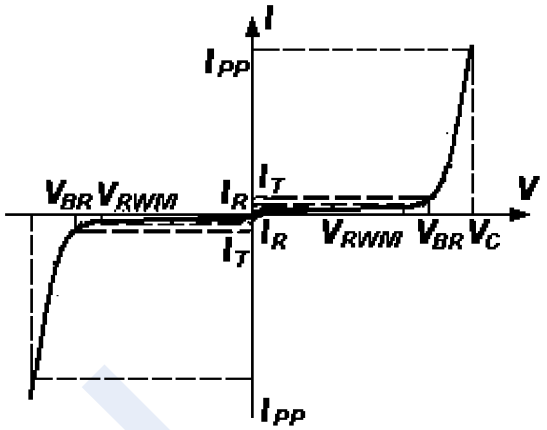
■ Typical Characterisitics

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



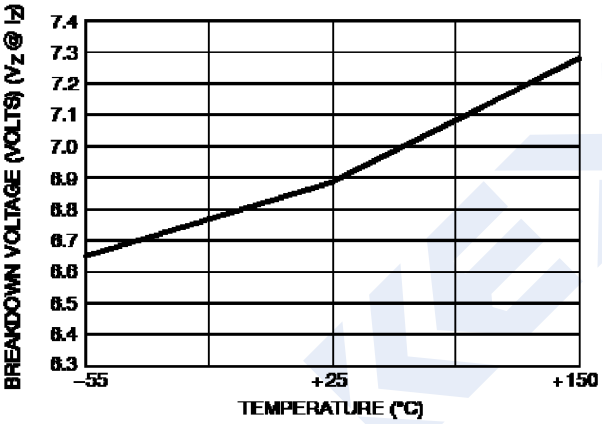


Figure 1. Typical Breakdown Voltage versus Temperature

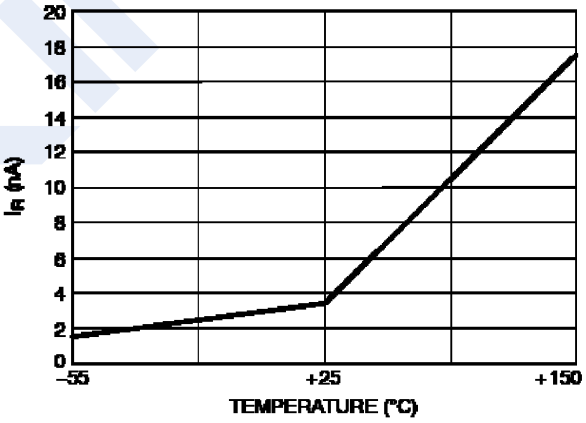


Fig 2. Typical Leakage Current versus Temperature