

# DPAD1, DPAD2, DPAD5, DPAD10

## Dual Pico-Amp Diode

### High Impedance Protection Circuits

### Absolute maximum ratings at $T_A = 25^\circ\text{C}$

Continuous Forward Gate Current

50 mA

Storage Temperature Range

- 55°C to + 125°C

At 25°C free air temperature:

#### Electrical Characteristics

		DPAD1			DPAD2			Process NJ01	
		Min	Typ	Max	Min	Typ	Max	Unit	Test Conditions
Reverse Current	$I_R$			- 1			- 2	pA	$V_R = - 20\text{V}$
Breakdown Reverse Voltage	$BV_R$	- 45			- 45			V	$I_R = - 1\ \mu\text{A}$
Forward Voltage Drop	$V_F$		0.8	1.5		0.8	1.5	V	$I_F = 5\ \text{mA}$
Capacitance	$C_R$			0.8			0.8	pF	$V_R = - 5\ \text{V}$ $f = 1\ \text{MHz}$
Differential Capacitance	$ C_{R1} - C_{R2} $			0.2			0.2	pF	$V_{R1} = V_{R2} = - 5\ \text{V}$ $f = 1\ \text{MHz}$

At 25°C free air temperature:

#### Electrical Characteristics

		DPAD5			DPAD10			Process NJ01	
		Min	Typ	Max	Min	Typ	Max	Unit	Test Conditions
Reverse Current	$I_R$			- 5			- 10	pA	$V_R = - 20\text{V}$
Breakdown Reverse Voltage	$BV_R$	- 45			- 45			V	$I_R = - 1\ \mu\text{A}$
Forward Voltage Drop	$V_F$		0.8	1.5		0.8	1.5	V	$I_F = 5\ \text{mA}$
Capacitance	$C_R$			0.8			2.0	pF	$V_R = - 5\ \text{V}$ $f = 1\ \text{MHz}$
Differential Capacitance	$ C_{R1} - C_{R2} $		0.2			0.2		pF	$V_{R1} = V_{R2} = - 5\ \text{V}$ $f = 1\ \text{MHz}$

**TO-72 Package**  
Dimensions in Inches (mm)  
**Pin Configuration**  
1 Cathode 1, 2 Anode 1,  
3 Cathode 2, 4 Anode 2

