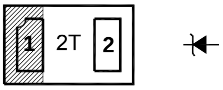
ESD9P12BP

Unidirectional ESD Protection Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Transparent top view
Marking Code: 2T
Simplified outline DFN1006-2B and symbol

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
IEC61000-4-2 (ESD)	Contact	V_{ESD}	± 30	KV
Peak Pulse Power (tp = 8/20 µs)		P_{PK}	140	W
Power Dissipation on FR-5 Board[1]		P_D	150	mW
Junction Temperature		T_j	- 55 to + 150	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

[1] FR-5 = 1.0 x 0.75 x 0.62 in

Characteristics at T_a = 25℃ (V_F = 0.9 V Max. at I_F = 10 mA)

Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	12	V
Reverse Breakdown Voltage at I_R = 1 mA	$V_{(BR)R}$	13.5	-	V
Forward Voltage at I_F = 10 mA	V_F	-	1.2	V
Reverse Current at V_{RWM} = 12 V	I_R	-	1	µA
Clamping Voltage at I_{PP} = 5.9 A, tp = 8/20 µs	V_C	-	23.7	V
Junction Capacitance at V_R = 0 V, f = 1 MHz	C_j	-	30	pF

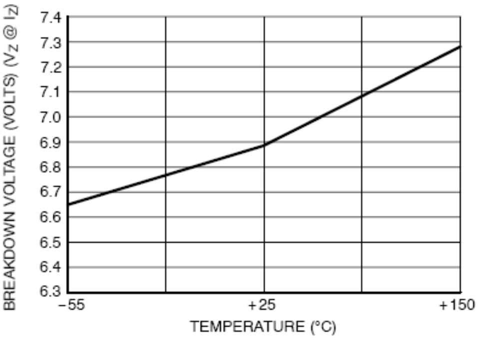


Figure 1. Typical Breakdown Voltage versus Temperature

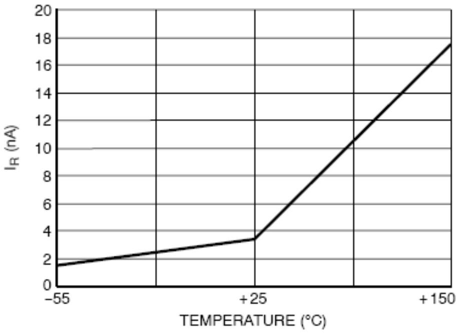
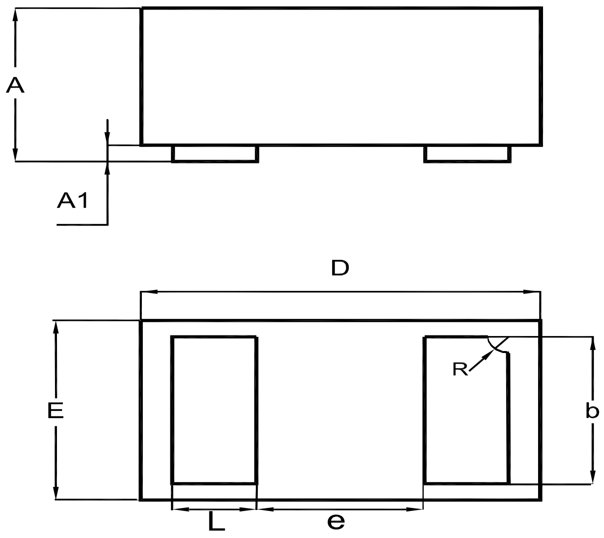


Figure 2. Typical Leakage Current versus Temperature

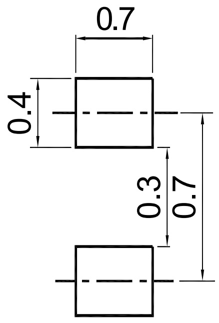
PACKAGE OUTLINE

Plastic surface mounted package; DFN1006-2B



UNIT	A	A1	b	D	E	e	L	R
mm	0.40 0.36	0.05 0	0.55 0.45	1.05 0.95	0.65 0.55	0.4	0.3 0.2	0.15 0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2B	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000