

## AUB0510D2

### ESD Protection Diode

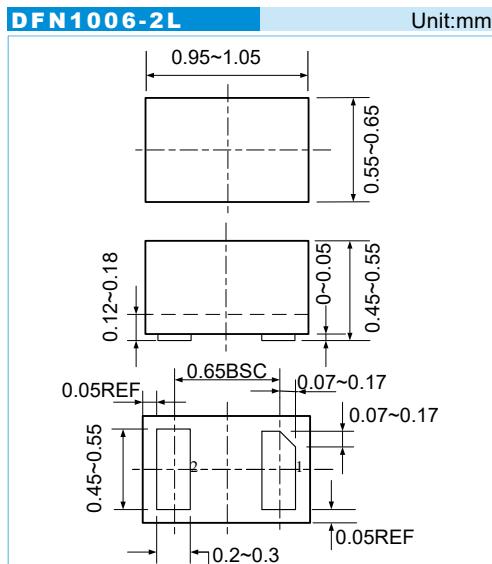
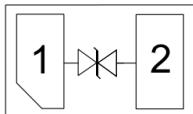
**VOLTAGE** 5 Volt

### FEATURES

- 2-pin leadless package
- Low Clamping Voltage
- Low operating voltage: 5V
- Low Leakage Current
- Ultra low capacitance: 15pF typical
- IEC 61000-4-2 ±30KV air ; ±30KV contact
- IEC 61000-4-5 (Lightning) 6A (8/20μs)
- Lead free in compliance with EU RoHS
- Marking code: B2

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0

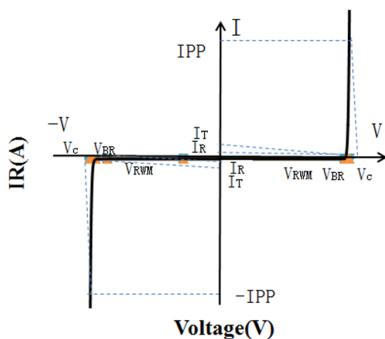


### ABSOLUTE MAXIMUM RATINGS( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	$P_{PP}$	80	W
Peak Pulse Current (8/20μs)	$I_{PP}$	6	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Parameters ( $T=25^\circ\text{C}$ )

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

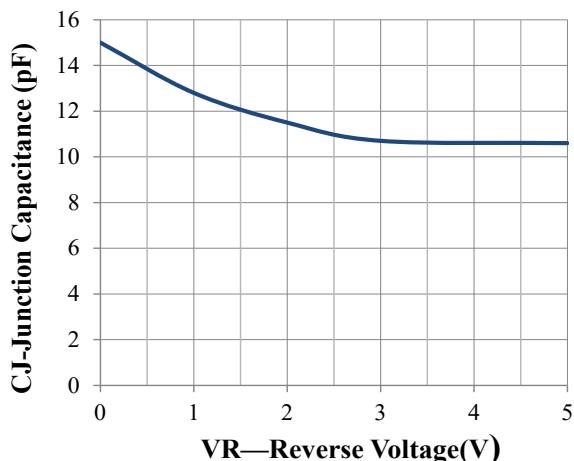


### ELECTRICAL CHARACTERISTICS( $T_A = 25^\circ\text{C}$ unless otherwise noted)

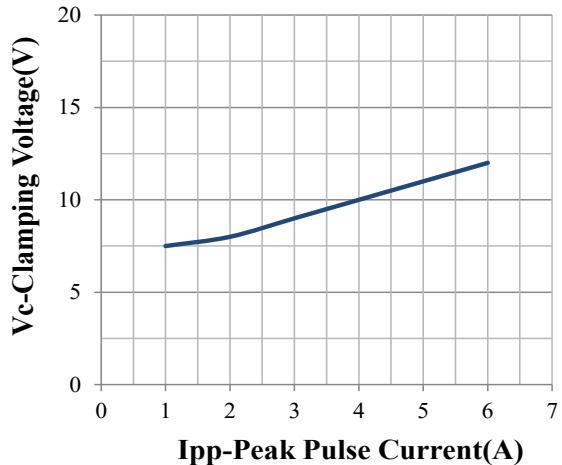
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	6.0			V
Reverse Leakage Current	$I_R$	$V_R=5\text{V}$			0.5	μA
Clamping Voltage	$V_c$	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$			7.5	V
	$V_c$	$I_{PP}=6\text{A}$ , $t_p=8/20\mu\text{s}$			12.5	V
Junction Capacitance	$C_J$	$V_R=0\text{V}$ , $f=1\text{MHz}$		15	18	pF

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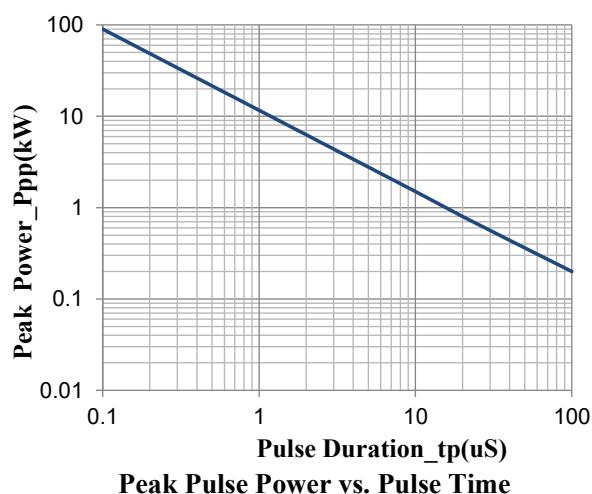
### Typical Characteristics



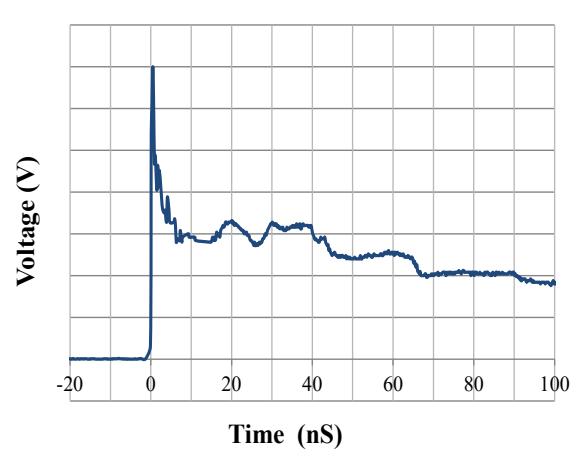
Junction Capacitance vs. Reverse Voltage



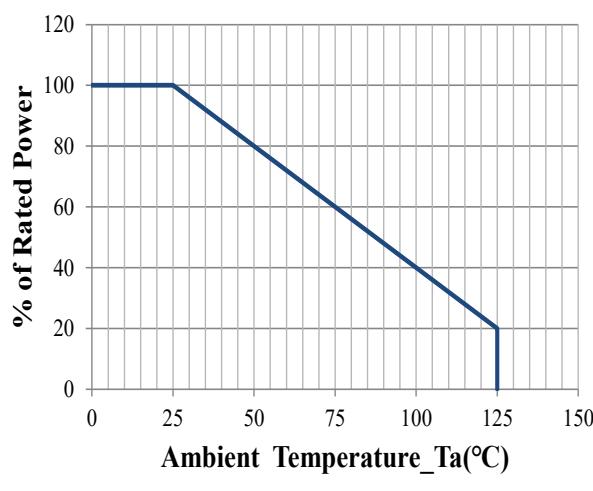
Clamping Voltage vs. Peak Pulse Current



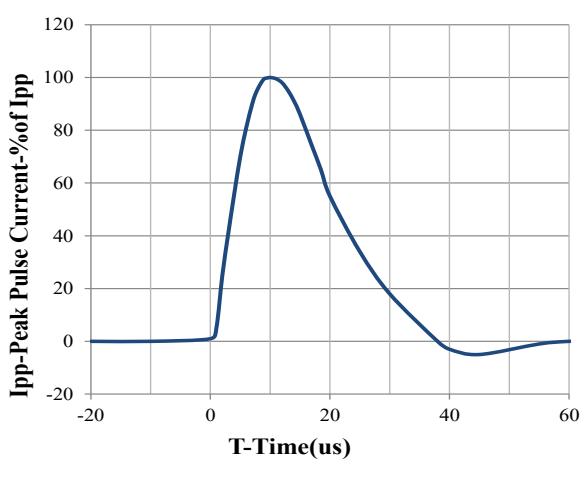
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform



Power Derating Curve



8 X 20us Pulse Waveform

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### ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
AUB0510D2	DFN1006-2L	7 Inch	10000