

超声式驻点烧蚀传感器

Ultrasonic Type Stagnation Ablation Sensors

BZ-027系列

BCK-027超声式驻点烧蚀变换器与CH传感器配套使用，测量弹头在飞行再入段时三向C/C复合材料端头帽的驻点烧蚀厚度。同时，可对再入时的强气动背景噪声进行监测。

性能指标

输出：直流电压 $2.5 \pm 0.2V$ 上叠加交流电压 $3 \pm 2V$ (P-P)

的超声回波信号， $+1 \pm 0.2V$ 与 $+4 \pm 0.2V$ 为每帧输出信号

的两个标记电平，每个标记电平的宽度为18ms，每幅输出信号的宽度为0.5s

供电电源： $\pm 15 \pm 1.5V$ ，耗电不大于0.5A

强背景噪声监测信号：0~5V缓变直流电压

输出阻抗： $< 3k\Omega$

输出限幅电平：正向 $\leq +6V$ ，负向 $\geq -0.3V$

采用L8-50kF高频插座

BCK-027 Ultrasonic stagnation ablation converter is matching with CH sensor, it is used to measure stagnation ablation thickness of three-way C/C composites end cap when the warhead enter segment in the flight. Meanwhile it can also monitor strong pneumatic backearthing noise if entry again.

Performance Index

Output: D.C voltage $2.5 \pm 0.2V$ overlay A.C $3 \pm 2V$ (P-P)

ultrasonic echo signal, Two marking level of each frame output signal are $+1 \pm 0.2V$ & $+4 \pm 0.2V$, width of each level is

18ms, width of each output signal is 0.5s

Power: $\pm 15 \pm 1.5V$, power consumption is no more than 0.5A

Strong backearthing noise monitoring signal: 0~5V Slowly varying DC voltage

output impedance: $< 3k\Omega$

level of output limitation: positive $\leq +6V$, negative $\geq -0.3V$

High frequency socket L8-50kF

