

TEMPERATURE-CONTROLLED OP AMP – HOPXX

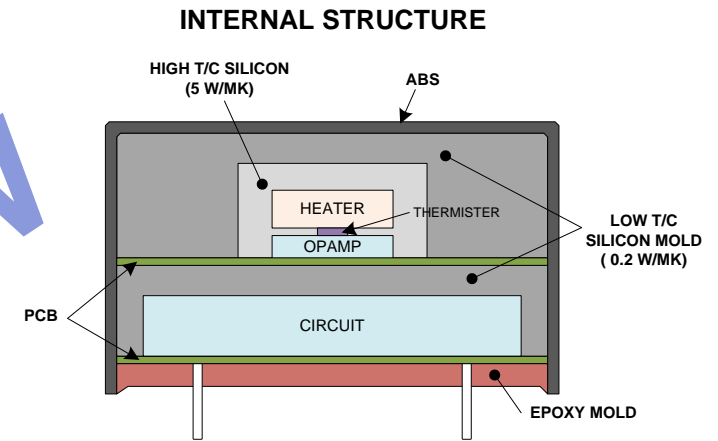
- REDUCTION OF OFFSET VOLTAGE DRIFT DOWN TO MORE THAN 1/10 OF ORIGINAL SPEC
(CHOPPER ANPLIFIER IS ONE ALTERNATIVE FOR LOW OFFSET DRIFT BUT HIGHER NOISE AND LIMITED POWER SUPPLY VOLTAGE INVOLVED)

- PERFORMANCE WITH OPAMP:OPA2277UA($dVOS/dT=\pm 1\mu V_{MAX}/^{\circ}C$) VBB:5V VCC:24V

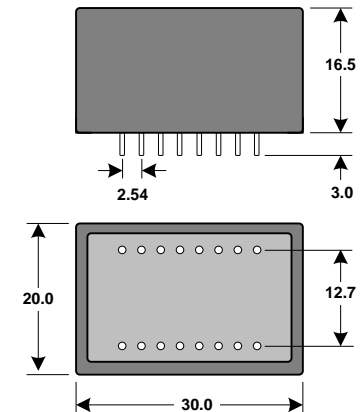
OPERATING TEMPERATURE	5°C - 50°C
TEMPERATURE SET	63±3°C
TEMPERATURE CONTROL WIDTH	±0.25°C
INPUT OFFSET VOLTAGE TC	< ±0.02μV _{MAX} /°C
OP AMP POWER DISSIPATION	< 100mW
WARMUP TIME	300S
OVERHEAT PROTECTION	110°C
CURRENT DRAWN FROM VCC	0 - 0.22A
CURRENT DRAWN FROM VBB	< 2.2mA (1.7mA _{TYP})

- REQUIREMENTS

VBB	5V±5%
VCC	5V±5% STANDARD (OPTIONAL < 30V)
TARGET TEMP.	65±2°C STANDARD (OPTIONAL ≥ 55°C ≤ 75°C)
VREF IC	HOP01:OPA2277UA VCC:24V±10% (DUAL OPAMP, VS:±15V)
	HOP02:OPA2277UA VCC:5V±10% (DUAL OPAMP, VS:±15V)
	HOP03:OPA551UA VCC:24V±10% (SINGLE OPAMP, VS:±30V)
	OPTIONAL NEEDS SO8 PACKAGED IC



OUTLINE



CIRCUIT SCHEMATIC

