

CA3002/...
**High-Reliability
IF Amplifier**

The CA3002 Slash (/) Series type is supplied in the 10-lead TO-5 style package.

TABLE A. POST BURN-IN, FINAL ELECTRICAL AND GROUP A SAMPLING TESTS

CHARACTERISTIC	SYMBOL	TEST CONDITIONS $V^+ = +6\text{ V}, V^- = -6\text{ V}$	LIMITS FOR INDICATED TEMPERATURES (°C)						UNITS
			MINIMUM			MAXIMUM			
			-55	+25	+125	-55	+25	+125	
Static									
Input Unbalance Current	I_{IU}	$I_{10} - I_5 = I_{IU}$	-	-	-	35	10	10	μA
Input Bias Current	I_I		-	-	-	85	35	30	μA
Total Drain Current	I_T	$I_2 + I_9 = I_T$	-	-	-	16.7	15.8	15.0	mA
Max Output Voltage	$+V_{OM}$		-	4.6	-	-	5.4	-	V
Min. Output Voltage	$+V_{OM}$	Terminal No. 1 Ground	-	-	-	-	0.05	-	V
Dynamic									
Noise Figure	NF	$f = 1.75\text{ MHz}, R_S = 1\text{ k}\Omega$	-	-	-	-	8	-	dB
Voltage Gain	A	$f = 1.75\text{ MHz}$, single-ended input and output	-	19	-	-	-	-	dB
AGC Range (Maximum Voltage gain to complete cutoff)	AGC	$f = 1.75\text{ MHz}$	-	60	-	-	-	-	dB

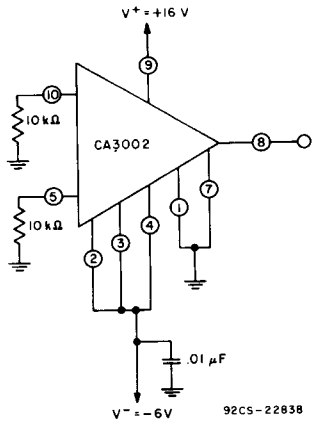
TABLE B. DELTA LIMITS at $T_A = 25^\circ\text{C}$ (/1 only)

CHARACTERISTIC	SYMBOL	TEST CONDITIONS AT $T_A = 25^\circ\text{C}$, $V^+ = +6\text{ V}$, $V^- = -6\text{ V}$	LIMITS	UNITS
			MAX. Δ	
Input Bias Current	I_I	$V^+ = +6\text{ V}$, Terminal No. 2 = -6 V, Terminal No. 1 to ground	± 10	μA
Total Drain Current	I_T	$I_2 = I_9 = I_T$	± 1.5	mA

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TABLE C. GROUPS C AND D END-POINT TESTS at $T_A = 25^\circ\text{C}$

CHARACTERISTIC	SYMBOL	TEST CONDITIONS $V^+ = +6\text{ V}, V^- = -6\text{ V}$	LIMITS		UNITS
			MIN.	MAX.	
Input Unbalance Current	I_{IU}	$I_{10} - I_5 = I_{IU}$	—	10	μA
Input Bias Current	I_I		—	35	μA
Total Drain Current	I_T	$I_2 + I_9 = I_T$	—	15.8	mA
Voltage Gain	A	$f = 1.75\text{ MHz}$, single-ended input and output	19	—	dB



Burn-in and operating life test circuit.

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