

ABSOLUTE MAXIMUM RATINGS			
PARAMETER	SYMBOL		UNITS
TOTAL POWER DISSIPATION	PD	20	W
INPUT TO OUTPUT VOLTAGE DIFFERENTIAL		40	V
OPERATING JUNCTION TEMPERATURE	TJ	-55 TO +150	°C
STORAGE TEMPERATURE	stg	-65 TO +150	°C
MAXIMUM LEAD TEMPERATURE	TL	300	°C
THERMAL RESISTANCE	RthJc	3	°C/W

SDP10201 GAT
SDP10201 GAR

FEATURES

- RUGGED PACKAGE
- HI-REL CONSTRUCTION
- CERAMIC EYELETS
- LEAD BENDING OPTIONS
- COPPER CORED 52 ALLOY PINS
- LOW IR LOSSES
- LOW THERMAL RESISTANCE
- OPTIONAL MIL-STD-883 SCREENING

ELECTRICAL CHARACTERISTICS:

PARAMETER	+5V TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS	-5V TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
OUTPUT VOLTAGE	Tj=25°C, VIN=10V, Io=1A	4.90	5.0	5.10	V	Tj=25°C, VIN=-10V, Io=5mA	-5.10	-5.0	-4.90	V
	Tj=25°C, 7.5V ≤ VIN ≤ 20V, 5mA ≤ IO ≤ 1A, PD ≤ 15W	4.9		5.1	V	Tj=25°C, -25V ≤ VIN ≤ -8V, 5mA ≤ IO ≤ 1.0A, P ≤ PD	-5.10		-4.90	V
	OVER TEMP, Tmin ≤ Tj ≤ Tmax	4.85		5.15	V	OVER TEMP, Tmin ≤ Tj ≤ Tmax	-5.15		-4.85	V
LINE REGULATION	Tj=25°C, 7.5V ≤ VIN ≤ 20V, Io=500mA			25	mV	Tj=25°C, -25V ≤ VIN ≤ -7V, Io=5mA		10	25	mV
	OVER TEMP, Tmin ≤ Tj ≤ Tmax		10	30	mV					
LOAD REGULATION	Tj=25°C, VIN=10V, 5mA ≤ Io ≤ 1.5A		15	25	mV	Tj=25°C, VIN=-10V, 5mA ≤ Io ≤ 1.5A			75	mV
	VIN=10V, 5mA ≤ Io ≤ 1A, OVER TEMP, Tmin ≤ Tj ≤ Tmax			50	mV					
RIPPLE REJECTION	Tj=25°C, 8V ≤ VIN ≤ 18V, Io=500mA	69			dB	Tj=25°C, -18V ≤ VIN ≤ -8V, Io=500mA	54			dB
OUTPUT NOISE VOLTAGE	Tj=25°C, VIN=10V, Io=1A		40		μV	f=10Hz TO 100KHz, CL=1μf Tj=25°C, VIN=-10V, Io=500mA		100		μV
DROPOUT VOLTAGE	Tj=25°C, Io=1A		2		V	Tj=25°C, Io=1A		2.0		V
SHORT CIRCUIT CURRENT	Tj=25°C, VIN=10V		2.1		A	Tj=25°C, VIN=-10V		1.8		A
PEAK OUTPUT CURRENT	Tj=25°C		2.4		A	Tj=25°C		2.0		A
AVG. TEMP. VAR. OF VOUT	0°C ≤ Tj ≤ Tmax, VIN=10V, Io=5mA		.4		mV/°C	0°C ≤ Tj ≤ Tmax, VIN=-10V, Io=5mA		.4		mV/°C
LONG TERM STABILITY	1000 HR. @ Tj=125°C, VIN=10V, Io=5mA		20		mV	1000 HR. @ Tj=125°C, VIN=-10V, Io=5mA		20		mV
QUIESCENT CURRENT	Tj=25°C, VIN=10V, Io=1A				mA	Tj=25°C, VIN=-10V, Io=500mA		1	2	mA
	OVER TEMP, Tmin ≤ Tj ≤ Tmax				mA	OVER TEMP, Tmin ≤ Tj ≤ Tmax			2.5	mA
QUIESCENT CURRENT CHANGE	Tj=25°C, VIN=10V, 5mA ≤ Io ≤ 1A			.4	mA	Tj=25°C, VIN=-10V, 5mA ≤ Io ≤ 1.5A			.4	mA
	OVER TEMP, Tmin ≤ Tj ≤ Tmax			.5	mA					
	Tj=25°C, VIN=7.5V ≤ VIN ≤ 20V, Io=500mA			.6	mA	Tj=25°C, -25V ≤ VIN ≤ -8V, Io=500mA			.4	mA
	OVER TEMP, Tmin ≤ Tj ≤ Tmax			.8	mA					

NOTE: ALL CHARACTERISTICS EXCEPT NOISE VOLTAGE AND RIPPLE ARE MEASURED USING PULSE TECHNIQUES (tw ≤ 10ms, DUTY CYCLE ≤ 5%).

STANDARD BEND CONFIGURATIONS

(CUSTOM BEND OPTIONS AVAILABLE)

SCHEMATIC