

PRODUCT CATALOG

REGULATOR, FIXED, ±12V, 1.5A

SDP10205	GAT
SDP10205	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

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

ELECTRICAL CHARACTERISTICS:										
PARAMETER	+12V TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS	-12V TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
OUTPUT VOLTAGE	Tj=25°C, VIN=19V, Io=1A	11.76	12	12.24	V	Tj=25°C, VIN=-17V, Io=5mA	-12.24	-12	-11.76	V
	Tj=25°C, 14.5V ≤ VIN ≤ 27V 5mA ≤ IO ≤ 1A, P ≤ 15W OVER TEMP, Tmin ≤ Tj ≤ Tmax	11.76		12.3	V	Tj=25°C, -32V ≤ VIN ≤ -14V 5mA ≤ IO ≤ 1.0A, P ≤ PD OVER TEMP, Tmin ≤ Tj ≤ Tmax	-12.24		-11.76	V
		11.64		12.4	V		-12.36		-11.64	V
LINE REGULATION	Tj=25°C, 14.5V ≤ VIN ≤ 27V, Io=500mA OVER TEMP, Tmin ≤ Tj ≤ Tmax			60	mV	Tj=25°C, -32V ≤ VIN ≤ -14V, Io=5mA		10	60	mV
			10	30	mV					
LOAD REGULATION	Tj=25°C, VIN=19V, 5mA ≤ IO ≤ 1.5A		28	80	mV	Tj=25°C, VIN=-17V, 5mA ≤ IO ≤ 1.5A		40	90	mV
	VIN=19V, 5mA ≤ IO ≤ 1A OVER TEMP, Tmin ≤ Tj ≤ Tmax			100	mV					
RIPPLE REJECTION	Tj=25°C, 15V ≤ VIN ≤ 25V, Io=500mA	62			dB	Tj=25°C, -25V ≤ VIN ≤ -15V, Io=500mA	56			dB
OUTPUT NOISE VOLTAGE	Tj=25°C, VIN=19V, Io=5mA		75		μV	f=10Hz TO 100KHz, CL=1μf Tj=25°C, VIN=-17V, Io=500mA		200		μV
DROPOUT VOLTAGE	Tj=25°C, Io=1A		2		V	Tj=25°C, Io=1A		1.1		V
SHORT CIRCUIT CURRENT	Tj=25°C, VIN=19V		1.5		A	Tj=25°C, VIN=-17V		1.3		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=19V, Io=5mA		-.8		mV/°C	0°C ≤ Tj ≤ Tmax, VIN=-17V, Io=5mA		-.9		mV/°C
LONG TERM STABILITY	1000 HR. @ Tj=125°C, VIN=19V, Io=5mA		50		mV	1000 HR. @ Tj=125°C, VIN=-17V, Io=5mA		48		mV
QUIESCENT CURRENT	Tj=25°C, VIN=19V, Io=1A OVER TEMP, Tmin ≤ Tj ≤ Tmax		4.5	6	mA	Tj=25°C, VIN=-17V, Io=500mA OVER TEMP, Tmin ≤ Tj ≤ Tmax		3		mA
				6.5	mA			4		mA
QUIESCENT CURRENT CHANGE	Tj=25°C, VIN=19V, 5mA ≤ IO ≤ 1A OVER TEMP, Tmin ≤ Tj ≤ Tmax			.4	mA	Tj=25°C, VIN=-17V, 5mA ≤ IO ≤ 1.5A			.4	mA
	Tj=25°C, VIN=14.5V ≤ VIN ≤ 27V, Io=500mA OVER TEMP, Tmin ≤ Tj ≤ Tmax			.6	mA	Tj=25°C, -32V ≤ VIN ≤ -14V, Io=500mA			.4	mA
				.8	mA					

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

STANDARD BEND CONFIGURATIONS	GAT	GAR	STANDARD BEND CONFIGURATIONS	SCHEMATIC
<p>(CUSTOM BEND OPTIONS AVAILABLE)</p>			<p>(CUSTOM BEND OPTIONS AVAILABLE)</p>	