

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

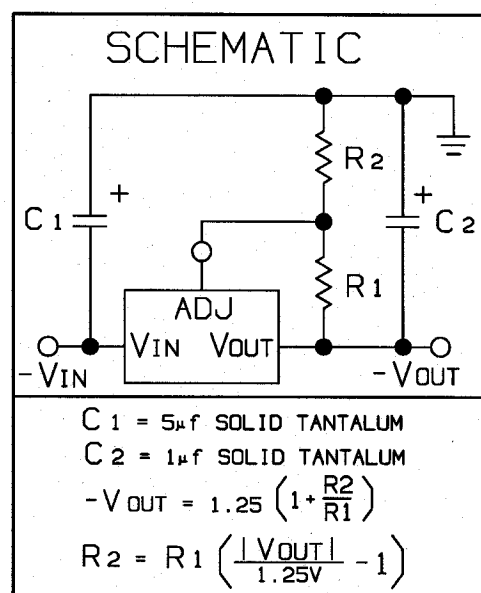
SDP137 JAA
SDP137 JAB
SDP137 JDA

FEATURES

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

ELECTRICAL CHARACTERISTICS T _c = 25°C (UNLESS OTHERWISE SPECIFIED)							
PARAMETER	SYMBOL	TEST CONDITIONS	NOTE	MIN.	TYP.	MAX.	UNITS
REFERENCE VOLTAGE	VREF	3V ≤ (VIN - VOUT) ≤ 40V 10mA ≤ IOUT ≤ 1.5A, P ≤ 20W	■	-1.200	-	-1.300	V
LINE REGULATION	$\frac{\Delta V_{OUT}}{\Delta V_{IN}}$	3V ≤ (VIN - VOUT) ≤ 40V	■	-	-	.05	%/V
LOAD REGULATION	$\frac{\Delta V_{OUT}}{\Delta I_{OUT}}$	10mA ≤ I _o ≤ 1.5A TA = 25°C 1 VOUT ≤ 5V VOUT ≥ 5V	-	-	-	25 0.5	mV %
		VOUT ≤ 5V VOUT ≥ 5V	■ ■	- -	- -	50 1.0	mV %
THERMAL REGULATION		TA = 25°C 20msec PULSE	-	-	-	0.02	%/W
RIPPLE REJECTION	RREJ	VOUT = -10V f = 120HZ CADJ = 0 CADJ = 10μf	■ ■	- 66	60 -	- -	dB dB
ADJUST PIN CURRENT	IADJ		■	-	-	100	μA
ADJUST PIN CURRENT CHANGE	ΔIADJ	10mA ≤ IL ≤ 1.5A 2.5V ≤ (VIN - VOUT) ≤ 40V	■	-	-	5	μA
MINIMUM LOAD CURRENT	Iomin	(VIN - VOUT) ≤ 40V VIN - VOUT ≤ 10V	■ ■	- -	- -	5.0 3.0	mA mA
CURRENT LIMIT	ICL	VIN - VOUT ≤ 15V (VIN - VOUT) ≤ 40V	■ ■	1.5 0.24	- -	- -	A A
TEMPERATURE STABILITY	$\frac{\Delta V_{OUT}}{\Delta TEMP}$	-55°C ≤ TJ ≤ +150°C	■	-	0.6	-	%
LONG TERM STABILITY	$\frac{\Delta V_{OUT}}{\Delta TIME}$	TA = 125°C, 1000 HRS.	-	-	-	1	%
RMS OUTPUT NOISE (% OF VOUT)	en	TA = 25°C 10HZ ≤ f ≤ 10KHZ	-	-	.003	-	%

REV. 10/93



NOTES:

- DENOTES THE SPECIFICATIONS WHICH APPLY OVER THE FULL OPERATING TEMPERATURE RANGE.
- 1) UNLESS OTHERWISE SPECIFIED, THESE SPECIFICATIONS APPLY FOR VIN - VOUT = 5V AND I_o = 0.5A.
 - 2) REGULATION IS MEASURED AT CONSTANT JUNCTION TEMPERATURE USING PULSE TESTING WITH A LOW DUTY CYCLE.

