

PRODUCT CATALOG

NEGATIVE REGULATOR, ADJUSTABLE

SDP7912A JAA
SDP7912A JAB
SDP7912A JDA

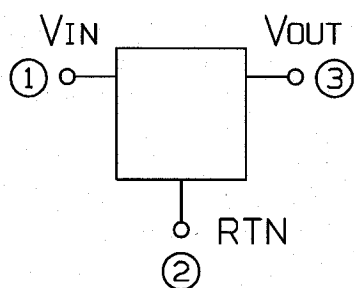
FEATURES

- 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

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL		UNITS
TOTAL POWER DISSIPATION	PD	30	W
INPUT TO OUTPUT VOLTAGE DIFFERENTIAL (VO=GND)		-35	V
OPERATING JUNCTION TEMPERATURE	TJ	-55 TO +175	°C
STORAGE TEMPERATURE	stg	-65 TO +150	°C
MAXIMUM LEAD TEMPERATURE	TL	300	°C
THERMAL RESISTANCE	RthJc	3.0	°C/W

SCHEMATIC



NOTES:

- 1) ALL REGULATION TESTS ARE MEASURED AT CONSTANT JUNCTION TEMPERATURE USING PULSE TESTING WITH A LOW DUTY CYCLE.
- 2) UNLESS OTHERWISE SPECIFIED, THESE SPECIFICATIONS APPLY FOR VIN-VOUT=19V, Io=500mA, CIN=0.33μF, COUT=0.1μF.
- 3) THIS TEST IS GUARANTEED BUT IS NOT TESTED IN PRODUCTION.

ELECTRICAL CHARACTERISTICS (NOTE 1)

PARAMETER	SYMBOL	TEST CONDITIONS (1)	MIN.	TYP.	MAX.	UNITS
OUTPUT VOLTAGE	VO	TJ=25°C	-11.8	-12.0	-12.2	V
LINE REGULATION (1)	$\frac{\Delta V_{OUT}}{\Delta V_{IN}}$	VIN=-14.5V to -30V, TJ=25°C VIN=-16V to -22V, TJ=25°C	-	4 3	60 30	mV mV
LOAD REGULATION (1)	$\frac{\Delta V_{OUT}}{\Delta I_{OUT}}$	Io=5mA to 1.5A, TJ=25°C Io=250mA to 750mA, TJ=25°C	-	20 4	90 60	mV mV
TOTAL OUTPUT VOLTAGE TOLERANCE	VOT	VIN=-14.5V to -27V Io=5mA to 1.0A, P≤20W	-11.7	-12.0	-12.3	V
QUIESCENT CURRENT	IQ	OVER TEMPERATURE RANGE TJ=25°C	-	-	4 3	mA mA
QUIESCENT CURRENT CHANGE	IADJ	W/LINE: VIN=-14.5V to -30V W/LOAD: Io=5mA to 1.0A	-	-	1.0 0.5	mA mA
DROPOUT VOLTAGE		ΔVo=100mV, TJ=25°C Io=1.0A	-	1.1	2.3	V
PEAK OUTPUT CURRENT	IOPK	TJ=25°C	1.5	-	3.3	A
SHORT CIRCUIT CURRENT		VIN=-35V, TJ=25°C	-	-	1.2	A
RIPPLE REJECTION	RREJ	ΔVIN=10V, f=120Hz, TJ=25°C	54	-	-	dB
OUTPUT NOISE VOLTAGE (RMS)	en	f=10Hz to 100KHz (NOTE 3)	-	25	80	μV/V
LONG TERM STABILITY	$\frac{\Delta V_{OUT}}{\Delta TIME}$	1000hrs. at TJ=125°C	-	60	-	mV
THERMAL SHUTDOWN		Io=5mA	-	175	-	°C

REV. 10/93

STANDARD BEND CONFIGURATIONS

JAA
JDA

JAB

STANDARD BEND CONFIGURATIONS

