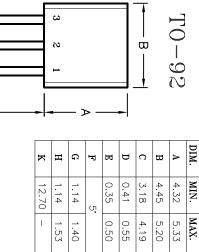


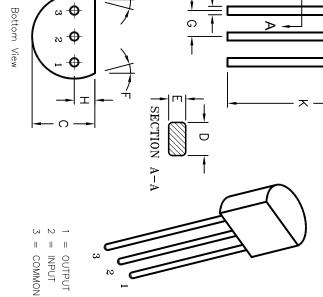
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CP #	REV	DESCRIPTION	DOC. NO	DATE	5 * Effective: 7/8/CHECKD DATE		APPRVD DATE
#	REV	DESCRIPTION	DRAWN		CHECKD		
262	A	RELEASED	ОН	2/4/03 JWM 2/5/03 DJC	MML	2/	5/03

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CAN BE REPRODUCED ONSENT OF SPC	DCP # REV	REV	DESCRIPTION	DRAWN	DRAWN DATE CHECKD DATE APPRVD DATE	CHECKD	DATE	APPRVD	DATE
	1262 A	Α	RELEASED	ОН	HO 2/4/03 JWM 2/5/03 DJC 2/5/03	MM	2/5/03	DJC	2/5/03
Description: A negative 3—ter	minal v	oltaae	reaulator in a TO-92 type package si	uitable	for num	nerous	applicati	ons rea	uirina
A negative 3—ter up to 100mA. Th	minal v	oltage Se fea:	A negative 3—terminal voltage regulator in a TO—92 type package suitable for numerous applications requiring up to 100mA. This device features thermal shutdown and current limiting making it remarkably rugged. In	uitable niting r	for num naking i	nerous of remar	applicati kably ru	ons req ugged. I	uiring n
most applications	s, no e	cternal	most applications, no external components are required for operation. Useful for on-card regulation or any	า. Usef	ul for o	n-card	regulati	ion or o	yny
other application	where	a regu	other application where a regulated negative voltage at a modest current level is needed. This device offers a	ırrent l	evel is r	needed.	This de	evice of	fers a
	+) - -	1))					



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K	н	G	Ŧ	E	D	С	В	Α
12.70	1.14	1.14	ο i	0.35	0.41	3.18	4.45	4.32
1	1.53	1.40		0.50	0.55	4.19	5.20	5.33



D

Features:

No External Components Required

substantial advantage over the common resistor/zener diode approach.

- Internal Short—Circuit Current limiting
- Internal Thermal Overload Protection

Absolute Maximum Ratings:

- Input Voltage, $V_{\rm N}=-35{\rm V}$ Internal Power Dissipation (Note 1), $P_{\rm D}=$ Internally Limited Operating Junction Temperature Range, $T_{\rm opr}=0^{\circ}{\rm C}$ to +70°C Maximum Junction Temperature, $T_{\rm J}=+125^{\circ}{\rm C}$ Storage Temperature Range, $T_{\rm sig}=-55^{\circ}{\rm C}$ to +150°C Lead Temperature (During soldering, 10sec.), $T_{\rm L}=+300^{\circ}{\rm C}$

Notes:

- 1. Thermal resistance, junction—to—ambient is +180°C/W when mounted with 0.40 inch leads on a P.C. board, and +160°C/W when mounted with 0.25 inch leads on a P.C. board.
- To ensure constant junction temperature, low duty cycle pulse testing is used

Electrical Characteristics:

otherwise specified) $(0^{\circ} \leqslant T_{J} \leqslant +125^{\circ}C, V_{OUT} = -15V, V_{IN} =$ -20V, $I_0 = 40$ mA, $C_{IN} = 0.33$ μ F, $C_{OUT} = 0.1$ μ F, Note 2, unless

Parameter	Symbol	Symbol Test Conditions	Min	Тур	Тур Мах	Units
Output Voltage	6	$T_{J} = +25^{\circ}C$	-14.4	-15	-15 -15.6	<
		$1mA \leqslant I_0 \leqslant 100mA, -30V \leqslant V_{IN} \leqslant -18V \left -14.25 \right -15 \left -15.75 \right $	-14.25	-15	-15.75	\ \
Line Regulation	Regline	$T_{J} = +25^{\circ}C, -30V \leqslant V_{IN} \leqslant -17.5V$	-	1	45	m۷
Load Regulation	Reg _{load}	$I_{J} = +25^{\circ}C$, 1mA $\leq I_{o} \leq$ 100mA	ı	1	125	m۷
Quiescent Current	$I_{\rm B}$	$I_0 = 100$ mA	-	2	6	mA
Quiescent Current Change	A.	With line, $-30V \leqslant V_{IN} \leqslant -18V$	ı	ı	0.25	mA
		With load, 1mA \leq I_0 \leq 40mA	_	1	0.1	mA
Output Noise Voltage	Ś	$T_J = +25^{\circ}C$, f = 10Hz to 10kHz	ı	120	1	νν
Ripple Rejection	RR	$-28.5V \leqslant V_{IN} \leqslant -18.5V$, f = 120Hz	50	_	_	dB
Input Voltage Required to Maintain Line Regulation	TCV ₀	$T_{\rm J} = +25^{\circ}{\rm C}$	I	I	-17.5	<

HEREIN ARE BASED UPON INFORMATION AND/OR TESS
BELIEVE TO BE ACCURATE AND RELIABLE. SINCE
CONDITIONS OF USE ARE BEYOND OUR CONTROL, TH
USER SHALL DETERMINE THE SUITABILITY OF THE PROI
FOR THE INTENDED USE AND ASSUME ALL RISK AND
LIABILITY WHATSOEVER IN CONNECTION THEREWITH. ALL STATEMENTS AND TECHNICAL INFORMATION CONTA

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PURPOSES ONLY.		UNLESS OTHERWISE	TOLERANCES:

DRAWN BY:

DATE:

DRAWING TITLE:

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CHECKED BY:	DATE:	SIZE	SIZE DWG. NO.		- 1	Е	ELECTRONIC F	ELECTRONIC FILE
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	7	ļ :						
APPROVED BY:	DAIE:							
DANIEL CAREY	2/5/03	SCALE: NTS	NTS	U.o.I	≤	U.O.M.: MILLIMETERS		M.: MILLIMETERS SHEET: 1 OF 1