



# COMPONENT NEWS

EVALUATION ENGINEERING

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## DISCONTINUED PLASTIC DUAL

The manufacturer of 151-0249-00, the ceramic-epoxy NPN Dual transistor, is going to discontinue this type of device because of lack of interest on a national level.

Most, if not all, of our applications can use 151-0232-00 as a direct replacement.

Any designs not yet in production should be changed over now. Production instruments will be changed as soon as they can be evaluated, and mods written.

If you know of any problem areas, or have any questions call Ext 7711.

-Ken Tomlin

## FET INPUT OPERATIONAL AMPLIFIER

MELCOR ELECTRONICS CORPORATION has a FET input operational amplifier for \$14.25 each. The differential and common mode input impedances are greater than  $10^{11} \Omega$ . Input bias current is  $\leq 100$  pA, typically 20 pA. The output impedance, open loop, is approximately 1k. Slew rate is 10V/ $\mu$ s and small signal unity gain frequency is 10 MHz. It is made of discrete devices, packaged cordwood style in a plastic case. Neither the package nor the company has been evaluated yet but we will do some more checking. The price is attractive and the samples meet published specifications.

A sample is available from me at Del. Sta. 50-222 or by calling Ext 6520.

-Don Roberts

## RECTIFIER BRIDGES

Two advantages are offered by molded rectifier bridge assemblies over their discrete diode counterparts. These are less mounting space and fewer leads. UNITRODE now has an edge-mounted unit which is rated 1A at 75°C and takes up only 0.44 x 0.19 inches and stands 0.44 inches short. Prices are competitive with our present 152-0199, -0200, and -0232-00 bridges in similar quantities, and takes up far less space.

When size is not the major consideration, discrete diodes should be considered. A 2A bridge rated at 400V can be built using 152-0066-00 rectifiers for less than one-half the cost of a molded bridge. Assembly cost is not much greater than the cost of mounting one of our present bridge units, and would add only a few cents to the parts cost. Our bridges require 1.53 x 0.6 inches while the 152-0066-00 bridge would need 1.0 x 0.9 inches of EC board space as a minimum.

For further information, call Ext 345.

-Norman Dodge

TEMPERATURE COMPENSATED ZENERS

The following is a listing of all temperature compensated zener diodes currently in use.

<u>TEMPERATURE COMPENSATED ZENERS</u>									
VOLTAGE	OPERATING CURRENT (mA)	T.C. (%/°C)	COMPENSATION TEST POINTS (°C)	VOLTAGE CHANGE BETWEEN POINTS (mV)	SPECIAL CHARACTERISTICS	TYPE	TEK PART NO	COST CODE	
6.2	7.5	.002	0, 75	19		1N3497	152-0317-00	C	
9.0	7.5	.01	-55,0,25,75,100	139	1.5mV max noise @ 2mA	(1N935A)	152-0123-00	B	
	2.0	.01	-15, 55	35		(1N936)	152-0359-00	C	
	7.5	.005	0, 25, 75	33	4mV max noise	IN937	152-0212-00	B	
	7.5	.002	0, 25, 75	13		IN938A	152-0411-00	C	
	7.5	.001	-55,0,25,75,100	13			152-0124-00	E	
	4.0	.001	0, 75	7			152-0366-00	E	
9.3	10.0	.01	0, 25, 75	70	.75w metal can	IN2620	152-0105-00	D	
11.7	7.5	.001	0, 25, 75	9	.02%/year	(1N944)	152-0171-00	F	

In order to maintain the rated temperature coefficient, the zener must be operated at the listed operating current. Any deviation, even a few tenths of a milliamp, may result in reduced temperature compensation. Changes in operating current will also change zener voltage due to the dynamic impedance, which may be as great as 100 ohms in some devices. The tolerance on the indicated voltage is ±5% for all units listed above. All are 250mW and DO-7 cases unless otherwise indicated.

For further information call Ext 345.

-Norman Dodge