

TYPES 600C THROUGH 628C

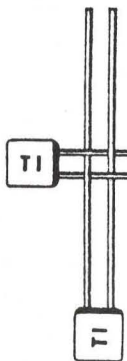
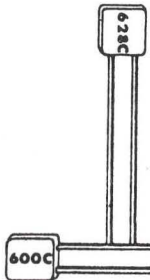
SILICON JUNCTION DIODES

BULLETIN NO. DL-5 431
MAY, 1955



Texas Instruments — your most experienced source of supply for silicon semiconductor devices — offers a complete silicon junction diode line. Included are 15 single crystal junction types in 20% voltage ranges from 4.7 to 470 volts. Many units have back resistances in the order of a thousand megohms at rated working voltages. These units can be used in applications where high operating temperatures make germanium diodes unsuitable.

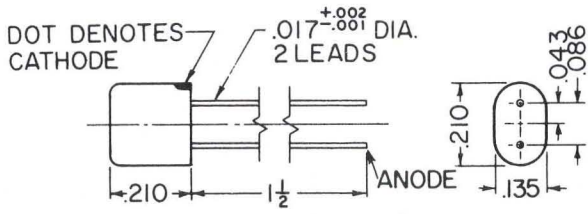
Every TI diode undergoes 100% inspection and aging which assures maximum reliability. Thoroughly tested at high temperatures, these uniformly high quality silicon diodes will increase electronic equipment dependability where heat, shock, and vibration are problems. Every unit is hermetically sealed for maximum protection against ambient moisture.



TI Type	Max. Rev. Working Voltage	† Min. Junct. Break-down Voltage	Minimum Forward Current 25°		Maximum Ratings at 25°C			Maximum Ratings at Elevated Temperatures				Typical Capacity $\mu\text{A} \mu\text{s}$ f = 500 kc Temp. = 25°C Rev. Volts -12V†
			Ma.	Volts	* Reverse Current Microamps	Dissipation mw	Average Rectified Forward Current ma	Ambient Temp. °C	* Reverse Current Microamps	Dissipation mw	Average Rectified Forward Current ma	
600C	—	30.0	3	1	8@-10V	100	25	100	20@-10V	40	15	2.5
601C	—	50.0	3	1	0.04@-10V	100	25	150	40@-10V	20	10	2.5
604C	4.7	5.5	60	1	0.1	150	100	150	50	40	40	20
606C	6.8	7.5	35	1	0.1	150	90	150	50	40	35	16
608C	10.0	11.0	25	1	0.1	125	75	150	50	20	25	12
610C	15.0	17.0	12	1	0.1	125	60	150	50	20	20	7
612C	22.0	25.0	7	1	0.1	125	50	150	50	20	20	5
614C	33.0	37.0	5	1	0.1	125	35	150	50	20	15	3.5
616C	47.0	52.0	3	1	0.2	100	30	125	40	20	15	2.5
618C	68.0	75.0	1.5	1	0.2	100	25	125	40	20	10	2.0
620C	100.0	110.0	0.9	1	0.2	100	20	125	40	20	8	1.4
622C	150.0	170.0	6.5	4	0.2	90	15	100	30	30	5	1.2
624C	220.0	250.0	3	4	0.4	80	10	71	20	40	5	1.0
626C	330.0	370.0	2	4	1.0	75	7	71	20	30	4	0.9
628C	470.0	520.0	1	4	1.0	70	5	71	20	20	3	0.7

* At maximum working voltage except for types 600C and 601C.
 † On types 604C, 606C, and 608C reverse voltage was reduced below breakdown voltage.
 ‡ Measured at 0.1 ma. Current increases rapidly above this point.

MECHANICAL SPECIFICATIONS



TYPICAL CURVES

