

RCA
Solid State
Division

Rectifiers

1N5211 1N5213 1N5216
1N5212 1N5214 1N5217
1N5215 1N5218

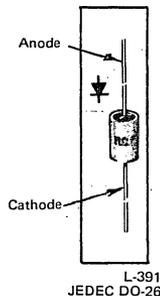
RCA-1N5211, 1N5212, 1N5213, 1N5214, 1N5215, 1N5216, 1N5217, and 1N5218* are hermetically sealed silicon rectifiers of the diffused-junction type utilizing small cylindrical metal cases and axial leads. Types 1N5215, 1N5216, 1N5217, and 1N5218 are insulated versions of types 1N5211, 1N5212, 1N5213, and 1N5214, respectively. These rectifiers feature dc forward current ratings of up to 1 A, a surge-current rating of 50A, low forward voltage drop, low leakage currents, and an operating-temperature range of -65°C to $+175^{\circ}\text{C}$.

* Formerly Dev. Nos. TA2845C, TA2845B, TA2845A, TA2845, TA7048C, TA7048B, TA7048A, and TA7048, respectively.

SILICON RECTIFIERS

DIFFUSED-JUNCTION TYPES

For Industrial and
Consumer-Product
Applications



- cylindrical design with axial leads for simple handling and installation
- compact, hermetically sealed metal case (0.405" max. length; 0.240" max. dia.)
- types 1N5215 through 1N5218 have transparent, high-dielectric-strength plastic sleeve over metal case
- high maximum forward-current ratings – up to 1 ampere DC at 75°C
- peak-reverse-voltage ratings from 200 to 800 volts
- operation at ambient temperatures to $+175^{\circ}\text{C}$

RECTIFIER SERVICE (For a supply-line frequency of 60 Hz)

Maximum Ratings, Absolute-Maximum Values:

	For resistive or inductive load				For capacitor-input filter						
	1N5211 1N5215	1N5212 1N5216	1N5213 1N5217	1N5214 1N5218	1N5211 1N5215	1N5212 1N5216	1N5213 1N5217	1N5214 1N5218			
PEAK REVERSE VOLTAGE	200	400	600	800	200	400	600	800	max.	V	
RMS SUPPLY VOLTAGE	140	280	420	560	70	140	210	280	max.	V	
FORWARD CURRENT:											
For ambient temperatures up to 75°C . For ambient temperatures above 75°C , see Rating Chart.											
DC	1	1	1	0.75	0.75	0.75	0.75	0.6	max.	A	
PEAK RECURRENT	-	-	-	-	6	6	6	5	max.	A	
SURGE – For "turn-on" time of 2 milliseconds	-	-	-	-	50	50	50	50	max.	A	
AMBIENT-TEMPERATURE RANGE:											
Operating	←-----→				←-----→					$^{\circ}\text{C}$	
Storage	←-----→				←-----→					$^{\circ}\text{C}$	
Operating	←-----→				←-----→					$^{\circ}\text{C}$	
Storage	←-----→				←-----→					$^{\circ}\text{C}$	
LEAD TEMPERATURE:											
For 10 seconds maximum	←-----→				←-----→				255	max.	$^{\circ}\text{C}$

Characteristics:

	1N5211 1N5215	1N5212 1N5216	1N5213 1N5217	1N5214 1N5218		
Maximum Instantaneous Forward Voltage Drop at dc forward current of 1 ampere and $T_A \leq 75^{\circ}\text{C}$	1.2	1.2	1.2	1.2	max.	V
Maximum Reverse Current:						
Dynamic, at $T_A = 75^{\circ}\text{C}^{**}$	0.2	0.2	0.2	0.2	max.	mA
Static, at $T_A = 25^{\circ}\text{C}^{***}$	0.005	0.005	0.005	0.005	max.	mA

**At max. peak reverse voltage and max. dc forward current.

***At max. peak reverse voltage and zero forward current.

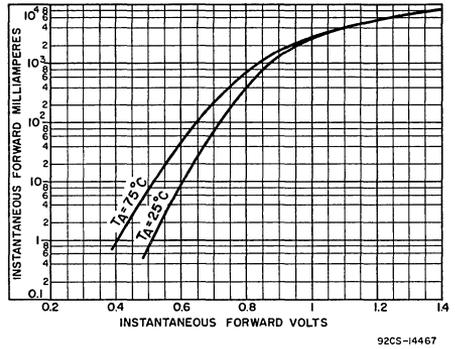
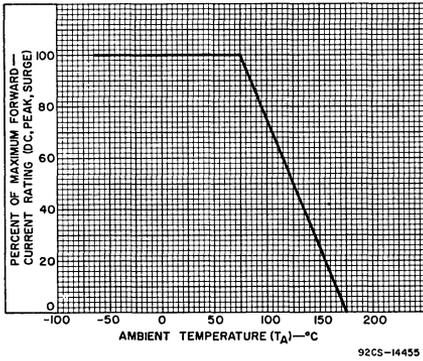


Fig. 1 - Rating Chart for Types 1N5211 through 1N5218.

Fig. 2 - Typical Forward Characteristics for Types 1N5211 through 1N5218.

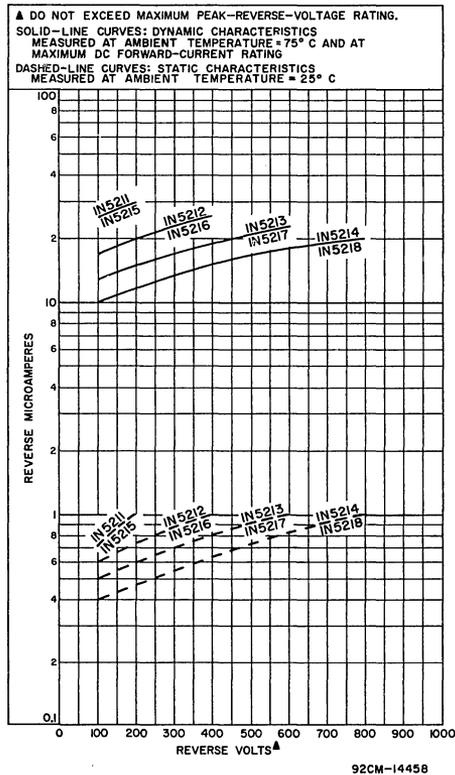


Fig. 3 - Typical Reverse Characteristics for Types 1N5211 through 1N5218.