DIGITRON™ Semiconductors

High-reliability discrete products
and engineering services since 1977

1N6513, 1N6515, 1N6517, 1N6519

0.5A – 2.0A RECTIFIERS

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.
- 2,000V to 10,000V working reverse voltage
- 70ns recovery time
- Operating temperature range = -65° to +175°C
- Storage temperature range = -65 to +200°C

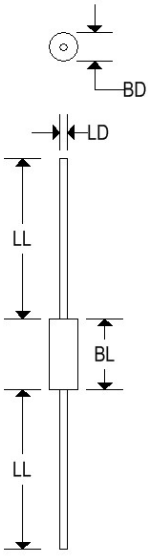
ELECTRICAL CHARACTERSITICS (T_A = 25°C unless otherwise specified)

Part Number	Working Reverse Voltage (V_{RWM})	Average Rectified Current (I_o)		Reverse Current @ V_{RWM} (I_R)		Forward Voltage (V_F)		1 Cycle Surge Current t_p = 8.3ms (I_{FSM})	Rep. Surge Current (I_{FRM})	Reverse Recovery Time (3) (t_{rr})	Thermal Impedance (Θ_{J-L})			Junction Cap. @ 50VDC @1kHz (C_J)
		55°C (1)	100°C (2)	25°C	100°C	25°C		25°C	25°C	25°C	L = 0.000	L = 0.125	L = 0.250	25°C
	V	A	A	µA	µA	V	A	A	A	ns	°C/W	°C/W	°C/W	pF
1N6513	2000	2.00	1.50	1.0	25	3.5	2.0	100	15	70	3	6	12	25
1N6515	3000	1.50	1.00	1.0	25	6.0	1.5	60	10	70	3	6	12	20
1N6517	5000	1.00	0.50	1.0	25	8.0	1.0	40	8	70	3	6	12	16
1N6519	10000	0.50	0.25	1.0	25	13.0	0.5	25	5	70	3	6	12	8

Note 1: T_L = 55°C, L = 0.375"
Note 2: T_L = 100°C, L = 0.375"
Note 3: I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A

MECHANICAL CHARACTERISTICS

Case	DIGICC(X) hermetically sealed glass
Marking	Body painted, alpha-numeric
Polarity	Cathode band



Part Number		DIGICC(X)			
		Inches		Millimeters	
		Min	Max	Min	Max
ALL	BD	0.155	0.215	3.940	5.460
ALL	LD	0.037	0.043	0.940	1.100
ALL	LL	1.000	1.300	25.400	33.020
1N6513 DIGICC(1)	BL	-	0.310	-	7.820
1N6515 DIGICC(2)	BL	-	0.330	-	8.380
1N6517 DIGICC(3)	BL	-	0.350	-	8.890
1N6519 DIGICC(4)	BL	-	0.510	-	12.954

DIGITRON™ Semiconductors

High-reliability discrete products and engineering services since 1977

1N6513, 1N6515, 1N6517, 1N6519

0.5A – 2.0A RECTIFIERS