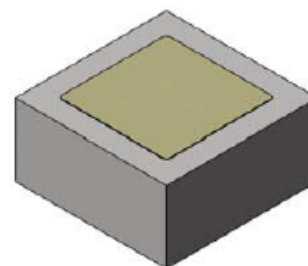


## Features

- Available in JANHC and JANKC per MIL-PRF-19500/477
- Electrically equivalent to 1N5802, 1N5804 & 1N5806
- Junction Passivated with Thermal Silicon Dioxide - Planar Design
- Backside Available with Solderable Ag Backside as JANHCF or JANKCF
- Compatible with all wire bonding and die attach techniques, with the exception of solder flow



TYPE	$V_R$	$V_{BR}$	$I_O$ $T_j = 75\text{ }^\circ\text{C}$
JANHCE1N5802	50 V	60 V	2.5 A
JANHCE1N5804	100 V	110 V	2.5 A
JANHCE1N5806	150 V	160 V	2.5 A
JANKCE1N5802	50 V	60 V	2.5 A
JANKCE1N5804	100 V	110 V	2.5 A
JANKCE1N5806	150 V	160 V	2.5 A

## Electrical Characteristics:

CHARACTERISTIC	SYMBOL	TYPICAL	MAXIMUM	UNITS
Reverse Current Rated $V_R$ , $T_C = 25\text{ }^\circ\text{C}$	$I_R$	0.01	1	$\mu\text{A}$
Reverse Current Rated $V_R$ , $T_C = 100\text{ }^\circ\text{C}$	$I_R$	1.0	50	$\mu\text{A}$
Forward Voltage Drop, $I_F = 4\text{A}$ , $T_C = 25\text{ }^\circ\text{C}$	$V_F$	0.80	0.875	Volts
Junction Capacitance @ $V_R = 10\text{V}$	$C_j$	15	25	Pf

## Reverse Recovery Characteristics:

CHARACTERISTIC	SYMBOL	TYPICAL	MAXIMUM	UNITS
Reverse Recovery Time $I_F = 0.5\text{A}$ , $I_R = 0.5\text{A}$ , $I_{RR} = 0.05\text{A}$	$T_{rr}$	20	25	ns
Forward Recovery Voltage @ 1A $T_r = 8\text{ ns}$	$V_{rr}$	1.5	2.2	V
Forward Recovery Time, $I_{FM} = 500\text{ mA}$	---	---	15	ns

# CD5802, CD5804 & CD5806



Rectifier Diode Chips  
Fast Recovery

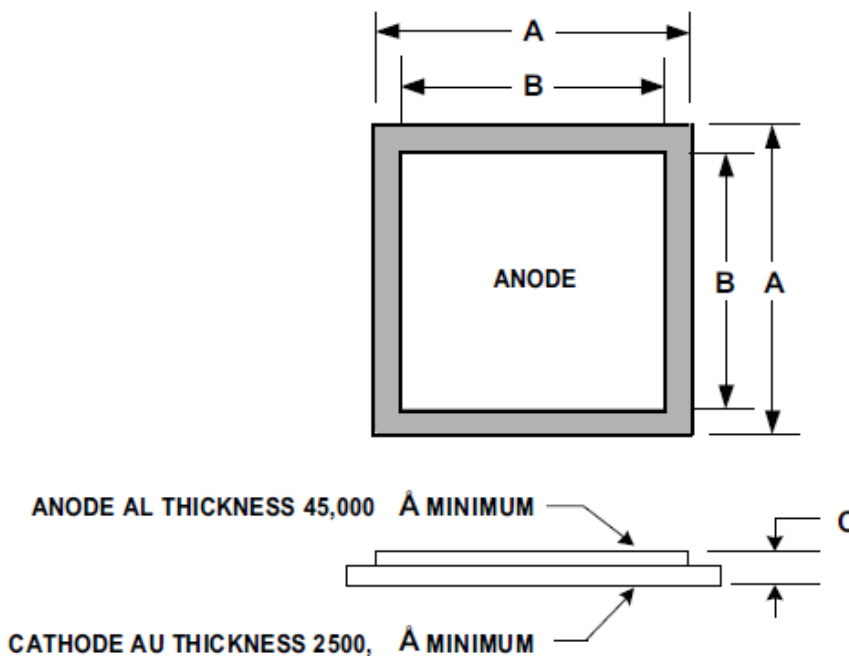
Rev. V1

## Group A Electricals:

DRAWING NUMBER: MIL-S-19500/477, NUMBER: JANHCE1N5802/5804/5806, D00G1N5802/5804/5806KC

TEST #	SYMBOL	TEST CONDITIONS	MINIMUM	MAXIMUM	UNIT
1		SUBGROUP A2			
2					
3	$V_{FM1}$	$I_{FM} = 1.0 \text{ A}$		0.875	V
4	$V_{FM2}$	$I_{FM} = 2.5 \text{ A}$		0.925	V
5	$I_{R1}$	$V_R = 50 \text{ V (5802)}$ $V_R = 100 \text{ V (5804)}$ $V_R = 150 \text{ V (5806)}$		1.0	A
6	$V_{(BR)1}$	$I_{(BR)} = 100 \mu\text{A}$	CD5802 CD5804 CD5806	60 100 160	V V V
7					
8		SUBGROUP A3			
9	$I_{R2}$	$V_R = 50 \text{ V (5802)}$ $V_R = 100 \text{ V (5804)}$ $V_R = 150 \text{ V (5806)}$ $T_A = +100 \text{ }^\circ\text{C}$		50	$\mu\text{A}$
10	$V_{FM3}$	$I_{FM} = 1.0 \text{ A } T_A = +100 \text{ }^\circ\text{C}$		0.8	V
11	$V_{FM4}$	$I_{FM} = 1.0 \text{ A } T_A = -65 \text{ }^\circ\text{C}$		1.075	V
12	$V_{(BR)2}$	$I_{(BR)} = 100 \text{ A } T_A = -65 \text{ }^\circ\text{C}$	CD5802 CD5804 CD5806	50 100 150	V V V
13					
14		SUBGROUP 4			
15	$t_{rr}$	$I_F = I_R = 0.5 \text{ A}, I_{RM(REC)} = 0.05 \text{ A}, dI/dt = 65 \text{ A}/\mu\text{s (min)}$		25	nS
16	$C_J$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}, V_{sig} = 50 \text{ mV (P-P) (max)}$		25	pF
17	$V_{FRM}$	$t_r = 8 \text{ nS}, I_{FM} = 500 \text{ mA}$		2.2	V
18	$t_{fr}$	$t_p \geq 20 \text{ nS}, t_r 8 \text{ nS}, V_{FR} = 1.1 \times V_F, I_{FM} = 250 \text{ mA(pk)}$		15	nS

## Outline Drawing



CD5802, CD5804, CD5806

Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	.039	.043	1.00	1.09
B	.031	.035	0.79	0.89
C	.008	.012	0.20	0.30

Notes:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

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