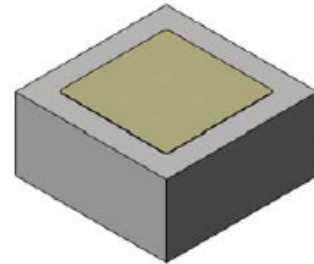


Features

- 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	μA
Reverse Current Rated V_R , $T_C = 100\text{ }^\circ\text{C}$	I_R	1.0	50	μA
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

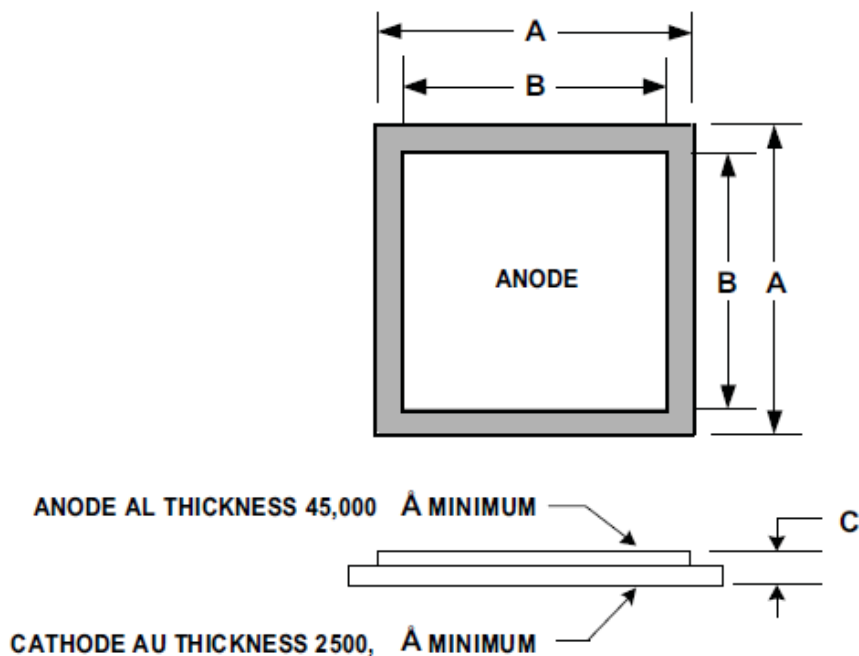
Rev. V1

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	μA
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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