

- 1N5711 AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/444
- 1N5712 AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/445
- SCHOTTKY BARRIER DIODE CHIPS FOR GENERAL PURPOSE APPLICATION
- SILICON DIOXIDE PASSIVATED
- COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES,

CD2810
 CD5711
 CD5712
 CD6857
 CD6858
 CD6916

MAXIMUM RATINGS

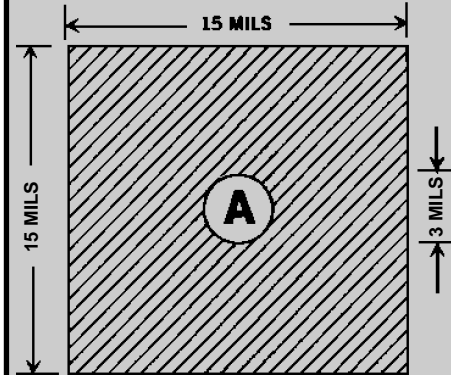
Operating Temperature: -55°C to +125°C
 Storage Temperature: -65°C to +150°C

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

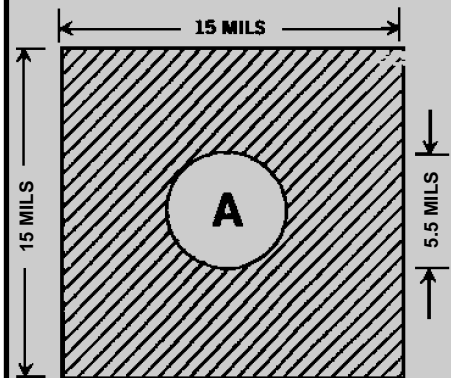
| CDI TYPE NUMBER | MINIMUM BREAKDOWN VOLTAGE (2) | MAXIMUM FORWARD VOLTAGE | MAXIMUM FORWARD VOLTAGE | MAXIMUM REVERSE LEAKAGE CURRENT | | MAXIMUM CAPACITANCE @ $V_R = 0$ VOLTS $f = 1.0$ MHz | FIGURE NUMBER |
|-----------------|-------------------------------|-------------------------|-------------------------|---------------------------------|-------|---|---------------|
| | $V_{BR} @ 10 \mu A$ | $V_F @ 1 mA$ | $V_F @ I_F$ | $I_R @ V_R$ | | C_T | |
| | VOLTS | VOLTS | VOLTS @ mA | nA | VOLTS | PICO FARADS | |
| CD2810 | 20 | 0.41 | 1.0 @ 35 | 100 | 15 | 1.2 | 1 |
| CD5711 | 70 | 0.41 | 1.0 @ 15 | 200 | 50 | 2.0 | 2 |
| CD5712 | 20 | 0.41 | 1.0 @ 35 | 150 | 16 | 1.2 | 1 |
| CD6857 | 20 | 0.35 | 0.75 @ 35 | 150 | 16 | 4.5 | 2 |
| CD6858 | 70 | 0.36 | 0.65 @ 15 | 200 | 50 | 4.5 | 2 |
| CD6916 | 40 (2) | 0.34 | 0.27 @ 0.1 | 100 | 1 | 5 | 2 |
| | | | 0.34 @ 1.0 | 200 | 20 | | |
| | | | 0.47 @ 10.0 | 500 | 40 | | |

NOTES: (1) Effective Minority Carrier Lifetime (τ) is 100 Pico Seconds

(2) CD6916 V_{BR} measured @ 500 nanoamps



BACKSIDE IS CATHODE
 FIGURE 1



BACKSIDE IS CATHODE
 FIGURE 2

DESIGN DATA

METALLIZATION:

Top: (Anode).....Au
 Back: (Cathode).....Au

AL THICKNESS.....25,000 Å Min

GOLD THICKNESS.....4,000 Å Min

CHIP THICKNESS.....10 Mils

TOLERANCES: ALL Dimensions
 ± 2 mils, Except Anode Pad Where
 Tolerance is ± 0.5 mils.



CD2810, CD5711, CD5712, CD6857, CD6858 and CD6916

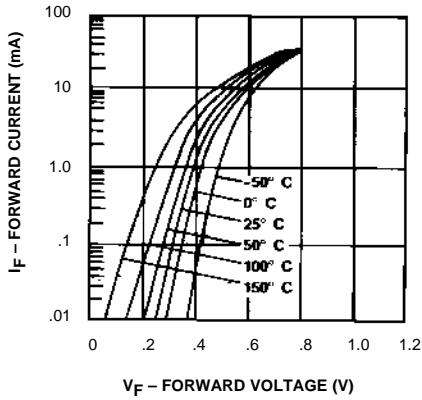


Figure 1.
I-V Curve Showing Typical Forward Voltage Variation with Temperature for the CD5712 and CD2810 Schottky Diodes.

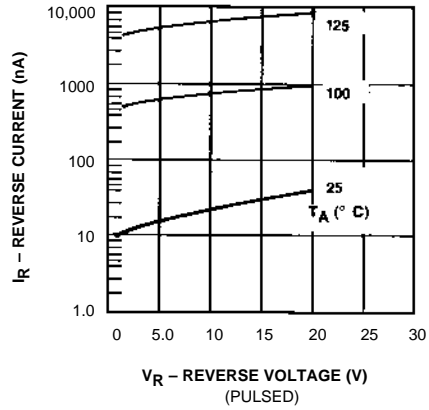


Figure 2.
CD5712 and CD2810
Typical Variation of Reverse Current (I_R) vs. Reverse Voltage (V_R) at Various Temperatures.

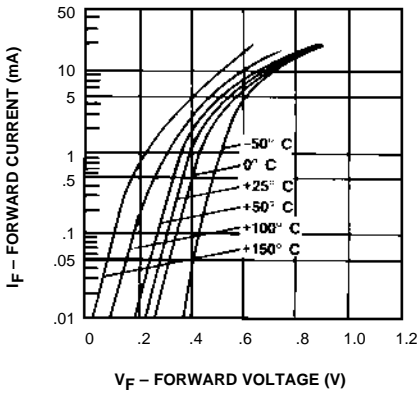


Figure 3.
I-V Curve Showing Typical Forward Voltage Variation with Temperature for Schottky Diode CD5711.

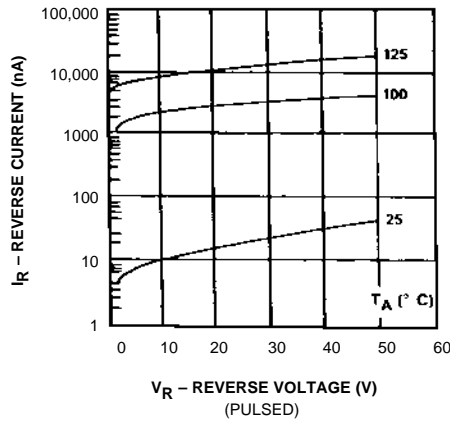


Figure 4.
CD5711 Typical Variation of Reverse Current (I_R) vs. Reverse Voltage (V_R) at Various Temperatures.

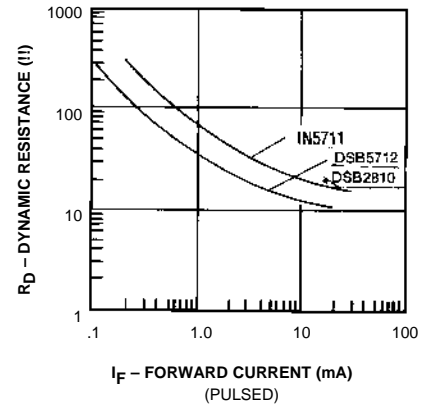


Figure 5.
Typical Dynamic Resistance (R_D) vs. Forward Current (I_F).