

- 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

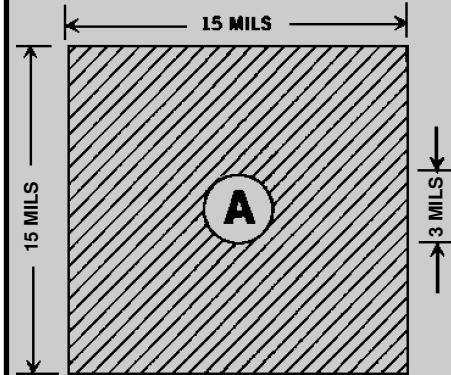
Operating Temperature: -55°C to +125°C  
 Storage Temperature: -65°C to +150°C

### ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

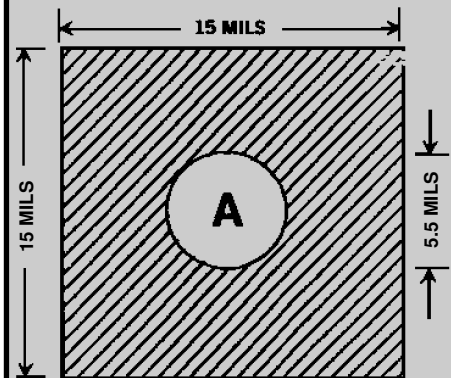
CDI TYPE NUMBER	MINIMUM BREAKDOWN VOLTAGE (2)	MAXIMUM FORWARD VOLTAGE	MAXIMUM FORWARD VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT		MAXIMUM CAPACITANCE @ $V_R = 0$ VOLTS $f = 1.0$ MHz	FIGURE NUMBER
	$V_{BR} @ 10 \mu A$	$V_F @ 1 mA$	$V_F @ I_F$	$I_R @ V_R$		$C_T$	
	VOLTS	VOLTS	VOLTS @ mA	nA	VOLTS	PICO FARADS	
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 ( $\tau$ ) 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).....Al  
 Back: (Cathode).....Au

AL THICKNESS.....25,000 Å Min

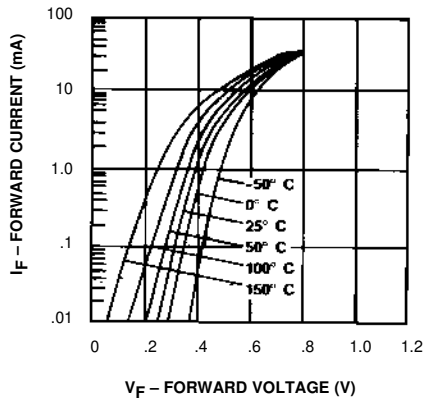
GOLD THICKNESS.....4,000 Å Min

CHIP THICKNESS.....10 Mils

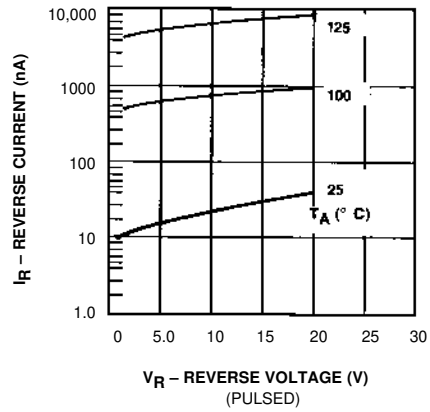
TOLERANCES: ALL Dimensions  
 $\pm 2$  mils, Except Anode Pad Where  
 Tolerance is  $\pm 0.5$  mils.



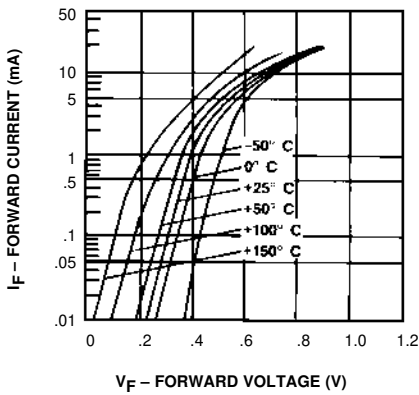
# CD2810, CD5711, CD5712, CD6857, CD6858 and CD6916



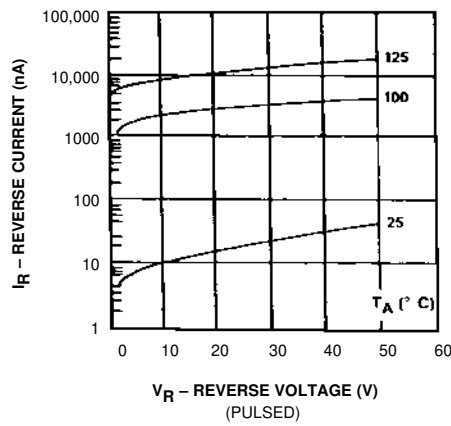
**Figure 1.**  
I-V Curve Showing Typical Forward Voltage Variation with Temperature for the CD5712 and CD2810 Schottky Diodes.



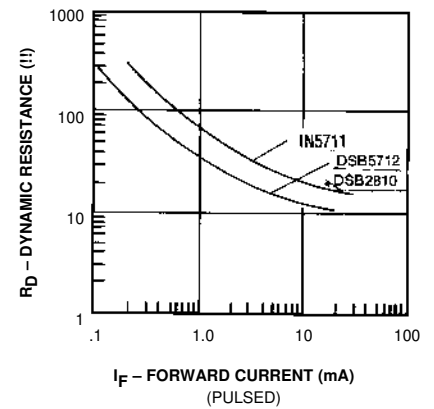
**Figure 2.**  
CD5712 and CD2810  
Typical Variation of Reverse Current ( $I_R$ ) vs. Reverse Voltage ( $V_R$ ) at Various Temperatures.



**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 ( $I_F$ ).