- 1N5711-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/444
- 1N5712-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/445
- SCHOTTKY BARRIER DIODES
- HERMETICALLY SEALED
- METALLURGICALLY BONDED

1N5711
1N5711-1
1N5712-1
1N6857-1
1N6858-1
DSB2810
DSB5712

MAXIMUM RATINGS

Operating Temperature: -65°C to +150°C
Storage Temperature: -65°C to +150°C
Operating Current: 5711 types :33mA dc@ T_L = +130°C, L = 3/8"
2810,5712 & 6858 types :75mA dc@ T_L = +110°C, L = 3/8"
6857 TYPE :75mA dc@ T_L = +70°C, L = 3/8"
Derating: all types: Derate to 0 (zero)mA@+150°C

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM FORWARD VOLTAGE	MAXIMUM FORWARD VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT		MAXIMUM CAPACITANCE @ V_R = 0 VOLTS f = 1.0 MHz	ESDS CLASS
	V_{BR} @ 10 μA	V_F @ 1 mA	V_F @ I_F	I_R @ V_R			C_T
	VOLTS	VOLTS	MILLIAMPS	nA	VOLTS	PICO FARADS	
DSB2810	20	0.41	1.0@35	100	15	2.0	1
1N5711,-1	70	0.41	1.0@15	200	50	2.0	1
DSB5712	20	0.41	1.0@35	150	16	2.0	1
1N5712-1	20	0.41	1.0@35	150	16	2.0	1
1N6857-1	20	0.35	0.75@35	150	16	4.5	2
1N6858-1	70	0.36	0.65@15	200	50	4.5	2

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

NOTICE: Qualification testing to M, JX, and JS levels for 6857 and 6858 types is underway. Contact the factory for qualification completion dates. These two part numbers are being introduced by CDI as "drop-in" replacements for the 5711 and 5712. They provide a more robust mechanical design and a higher ESDS class with the only trade-off being an increase in capacitance.

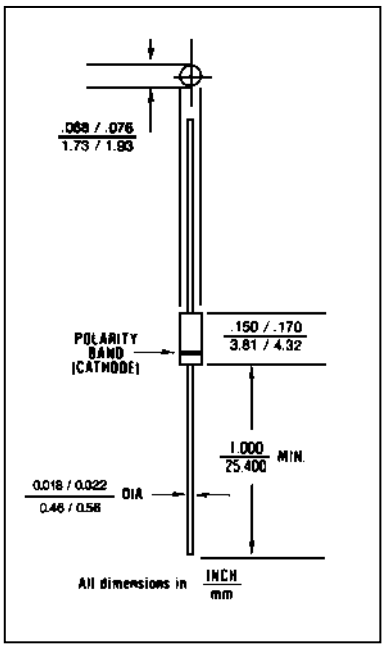


FIGURE 1

DESIGN DATA

CASE: Hermetically sealed glass case per MIL-PRF-19500/444 and /445 DO-35 Outline

LEAD MATERIAL: Copper clad steel.

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 250 °C/W maximum at L = .375 inch

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 40 °C/W maximum

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any.

COMPENSATED DEVICES INCORPORATED
22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379
WEBSITE: http://www.cdi-diodes.com E-mail: mail@cdi-diodes.com

1N5711, 1N5712, 1N6857, 1N6858
DSB5712 and DSB2810
INCLUDING -1 VERSIONS

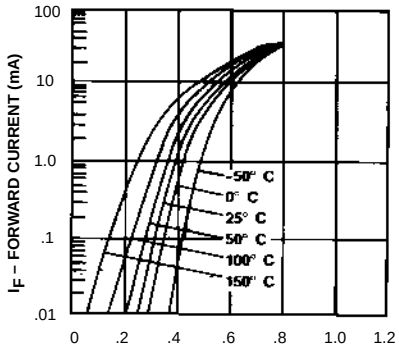
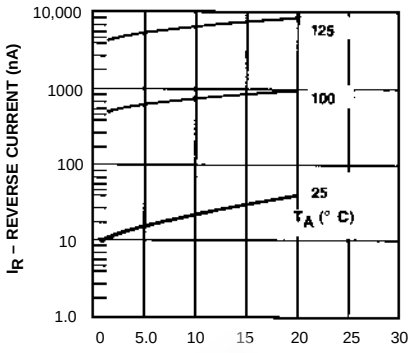


Figure 1.
I-V Curve Showing Typical Forward Voltage Variation with Temperature for the DSB5712 and DSB2810 Schottky Diodes.



(PULSED)

Figure 2.
DSB5712 and DSB2810 Typical Variation of Reverse Current (I_R) vs. Reverse Voltage (V_R) at Various Temperatures.

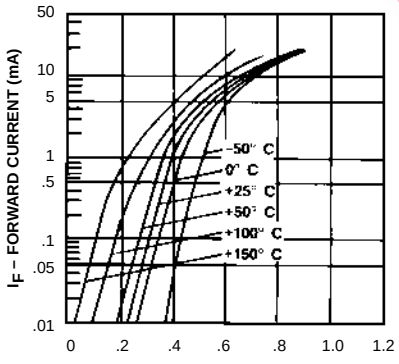
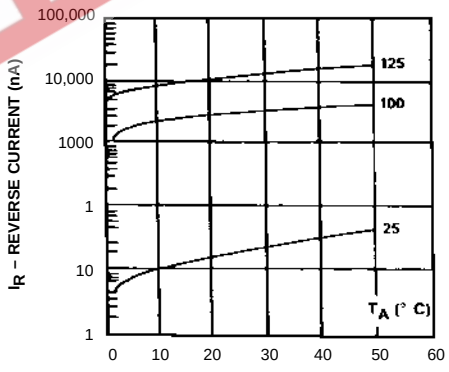
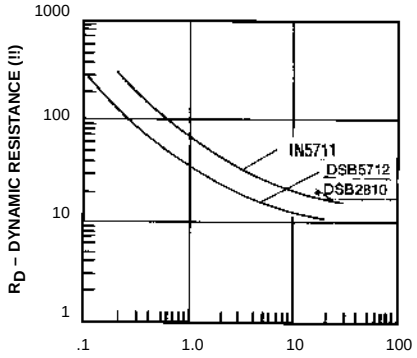


Figure 3.
I-V Curve Showing Typical Forward Voltage Variation with Temperature for Schottky Diode 1N5711.



(PULSED)

Figure 4.
1N5711 Typical Variation of Reverse Current (I_R) vs. Reverse Voltage (V_R) at Various Temperatures.



(PULSED)

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