

## MECHANICAL and PACKAGING

- CASE: Hermetically sealed glass DO-213AA MELF (SOD-80, LL34) case package.
- TERMINALS: Tin/lead plated or RoHS compliant matte-tin (on commercial grade only) over copper clad steel. Solderable per MIL-STD-750, method 2026.
- POLARITY: Cathode end is banded.
- MOUNTING: The axial coefficient of expansion (COE) of this device is approximately +6PPM/°C. The COE of the mounting surface system should be selected to provide a suitable match with this device.
- MARKING: Part number.
- TAPE & REEL option: Standard per EIA-296. Consult factory for quantities.
- WEIGHT: Approximately 0.2 grams.
- See [Package Dimensions](#) on last page.

## PART NOMENCLATURE

**JAN 1N5711 UR -1 (e3)**

### Reliability Level

JAN = JAN level  
JANTX = JANTX level  
JANTXV = JANTXV level  
Blank = Commercial grade

### JEDEC type number

(see [Electrical Characteristics](#) table)

### RoHS Compliance

e3 = RoHS compliant (on commercial grade only)  
Blank = non-RoHS compliant

### Metallurgically Bonded

### MELF Surface Mount

**CDLL 2810 (e3)**

### Microsemi Designation

**Series number**  
(see [Electrical Characteristics](#) table)

### RoHS Compliance

e3 = RoHS compliant  
Blank = non-RoHS compliant

## SYMBOLS & DEFINITIONS

Symbol	Definition
C	Capacitance: The capacitance in pF at a frequency of 1 MHz and specified voltage.
f	frequency
I <sub>R</sub>	Reverse Current: The dc current flowing from the external circuit into the cathode terminal at the specified voltage V <sub>R</sub> .
I <sub>O</sub>	Average Rectified Output Current: The Output Current averaged over a full cycle with a 50 Hz or 60 Hz sine-wave input and a 180 degree conduction angle.
t <sub>rr</sub>	Reverse Recovery Time: The time interval between the instant the current passes through zero when changing from the forward direction to the reverse direction and a specified decay point after a peak reverse current occurs.
V <sub>(BR)</sub>	Breakdown Voltage: A voltage in the breakdown region.
V <sub>F</sub>	Forward Voltage: A positive dc anode-cathode voltage the device will exhibit at a specified forward current.
V <sub>R</sub>	Reverse Voltage: A positive dc cathode-anode voltage below the breakdown region.
V <sub>RWM</sub>	Working Peak Reverse Voltage: The peak voltage excluding all transient voltages (ref JESD282-B). Also sometimes known historically as PIV.

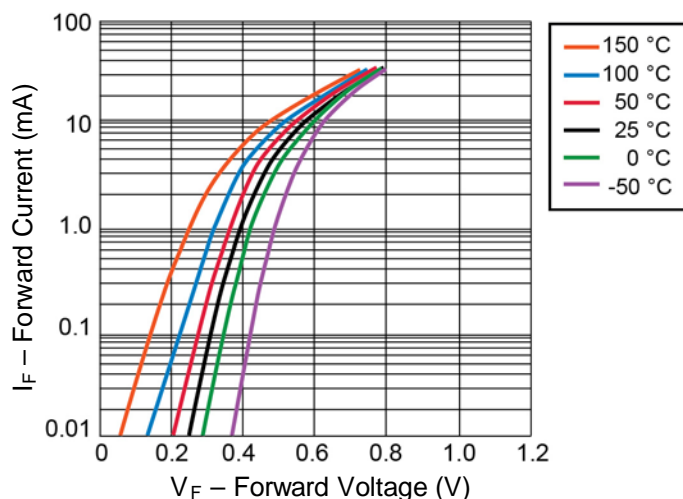
**ELECTRICAL CHARACTERISTICS @  $T_A = 25^\circ\text{C}$  unless otherwise noted**

TYPE NUMBER	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM FORWARD VOLTAGE	MAXIMUM FORWARD VOLTAGE	WORKING PEAK REVERSE VOLTAGE	MAXIMUM REVERSE LEAKAGE CURRENT		MAXIMUM CAPACITANCE @ $V_R = 0$ VOLTS $f = 1.0\text{ MHz}$
	$V_{(BR)} @ 10\text{ }\mu\text{A}$	$V_F @ 1\text{ mA}$	$V_F @ I_F$	$V_{RWM}$	$I_R @ V_R$		$C_T$
	Volts	Volts	V @ mA	V (pk)	nA	Volts	pF
1N5711UR-1	70	0.41	1.0 @ 15	50	200	50	2.0
1N5712UR-1	20	0.41	1.0 @ 35	16	150	16	2.0
1N6857UR-1	20	0.35	0.75 @ 35	16	150	16	4.5
1N6858UR-1	70	0.36	0.65 @ 15	50	200	50	4.5
CDLL2810	20	0.41	1.0 @ 35	50	100	15	2.0
CDLL5711	70	0.41	1.0 @ 15	50	200	50	2.0
CDLL5712	20	0.41	1.0 @ 35	16	150	16	2.0
CDLL6263	60	0.41	1.0 @ 15	16	200	50	2.2
CDLL6857	20	0.35	0.75 @ 35	16	150	16	4.5
CDLL6858	70	0.36	0.65 @ 15	50	200	50	4.5

**NOTE:**

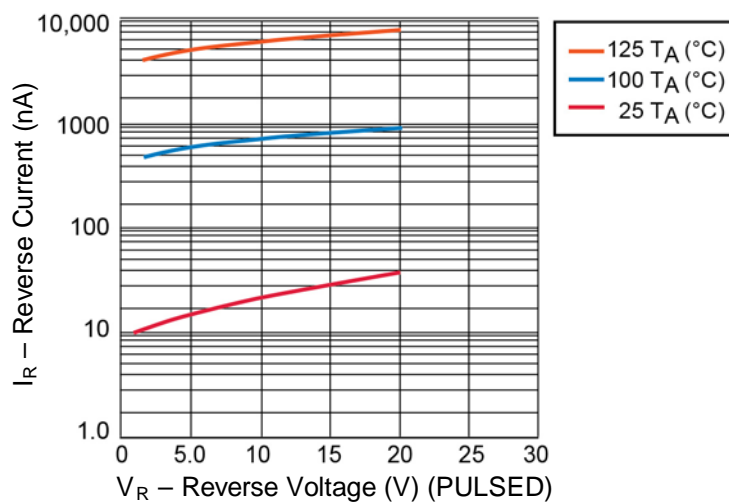
- Effective minority carrier lifetime ( $\tau$ ) is 100 pico seconds.

## GRAPHS



**FIGURE 1**

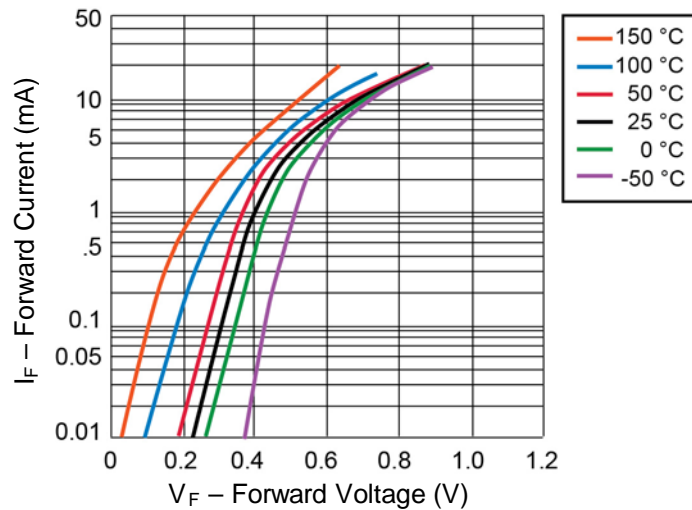
I-V Curve showing typical Forward Voltage Variation  
Temperature for the 1N5712UR-1, CDLL5712 and CDLL2810 Schottky Diodes



**FIGURE 2**

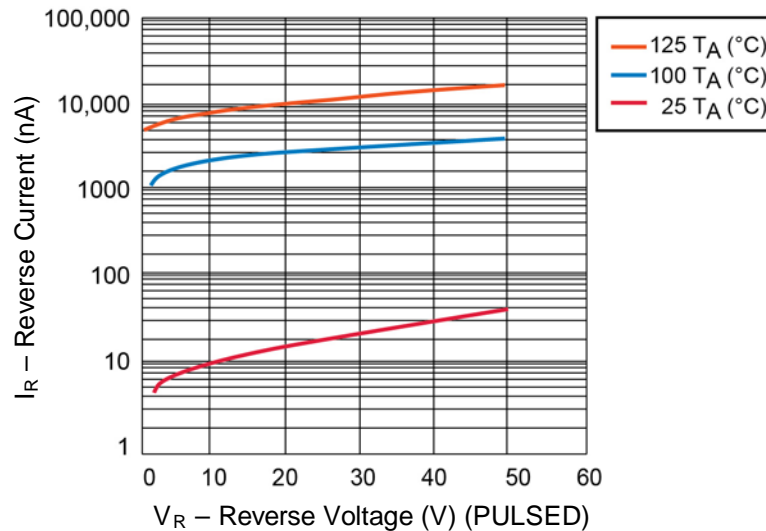
1N5712UR-1, CDLL5712 and CDLL2810 Typical variation of Reverse  
Current ( $I_R$ ) vs Reverse Voltage ( $V_R$ ) at Various Temperatures

## GRAPHS



**FIGURE 3**

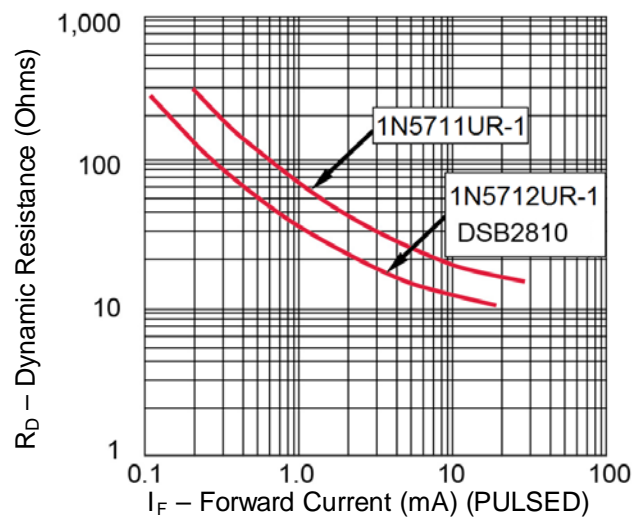
I – V curve showing typical Forward Voltage Variation  
With Temperature Schottky Diode 1N5711UR-1



**FIGURE 4**

1N5711UR-1 Typical Variation of Reverse Current ( $I_R$ ) vs Reverse Voltage ( $V_R$ )  
at Various Temperatures

## GRAPHS



**FIGURE 5**

Typical Dynamic Resistance ( $R_D$ ) vs Forward Current ( $I_F$ )