

# SOT23 SILICON DUAL VARIABLE CAPACITANCE DIODE

**ZDC833A**

**ISSUE 2 – JANUARY 1998**

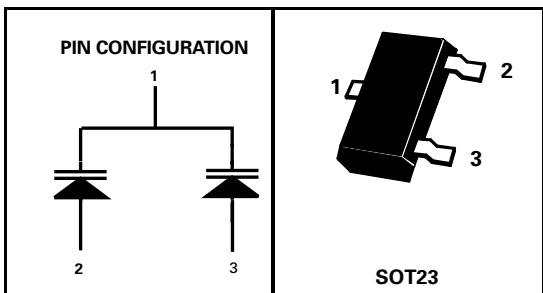
**FEATURES**

- \* VHF to UHF operation
- \* Common Cathode Dual Diode
- \* Monolithic construction

**APPLICATIONS**

- \* Mobile radios and Paggers
- \* Cellular telephones
- \* Voltage controlled Crystal Oscillators

**PARTMARKING DETAIL ZDC833A – C2A**



**ABSOLUTE MAXIMUM RATINGS.(Each Diode)**

PARAMETER	SYMBOL	VALUE	UNIT
Forward Current	$I_F$	200	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}C$

**ELECTRICAL CHARACTERISTICS (at  $T_{amb} = 25^{\circ}C$  ). (Each Diode)**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	$V_{BR}$	25			V	$I_R = 10\mu A$
Reverse Leakage Current	$I_R$		0.2	10	nA	$V_R = 20V$
Temperature Coefficient	$\eta$			400	ppm/ $^{\circ}C$	$V_R = 3V, f=1MHz$
Diode Capacitance	$C_d$	29.7	33	36.3	pF	$V_R = 2V, f=1MHz$
Capacitance Ratio	$C_d / C_d$	5.0		6.5		$V_R = 2V/20V, f=1MHz$
Figure of Merit	Q	200				$V_R = 3V, f=50MHz$



# ZDC833A

## TYPICAL CHARACTERISTICS

