

# SOT23 SILICON DUAL VARIABLE CAPACITANCE DIODE

## ZDC833A

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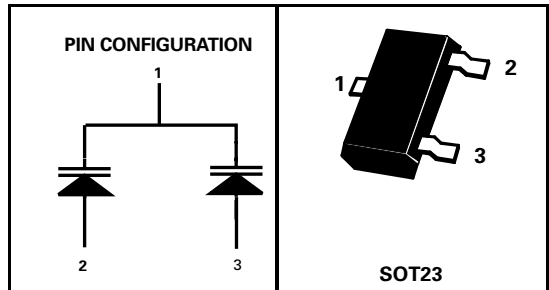
### FEATURES

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

### APPLICATIONS

- \* Mobile radios and Pagers
- \* 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 $T_{amb}=25^{\circ}\text{C}$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}\text{C}$

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

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

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## TYPICAL CHARACTERISTICS

