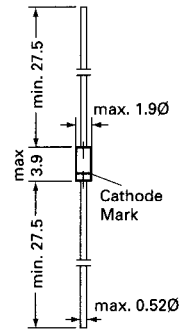


# 1S2638 TUNER AFC DIODE

## AFC Diode

The 1S2638 is a variable Capacitor Diode intended for AFC Applications, VHF TV Applications, FM Receivers, Air Craft Communications Gear, and other receivers in the 1 MHz to 500 MHz.



Glass case JEDEC DO-35

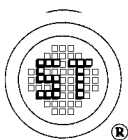
Dimensions in mm

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Breakdown Voltage	BV	10	Volts
Forward Current	$I_F$	250	mA
Power Dissipation	$P_D$	350	mW
Operating Temperature	$T_A$	-65 to + 175	$^\circ\text{C}$
Storage Temperature	$T_S$	-65 to + 200	$^\circ\text{C}$

## ELECTRICAL SPECIFICATIONS ( $T_A = 25^\circ\text{C}$ unless otherwise noted.)

PARAMETER	MIN.	TYP.	MX.	UNITS	TEST CONDITIONS
$I_R$			5	$\mu\text{A}$	$V_R = 10\text{V}$
Nominal Capacitance	5	10	20	PF	$V_R + 4.0\text{V}$ , $f = 1.0\text{ MHz}$
Q	50				$V_R = 4\text{V}$ , $f = 100\text{MHz}$

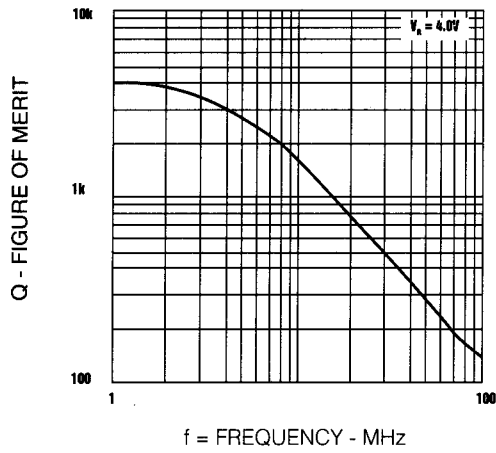


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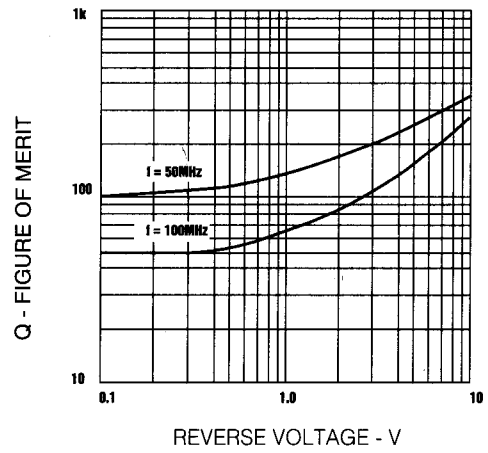


# 1S2638 TUNER AFC DIODE

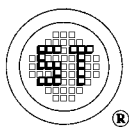
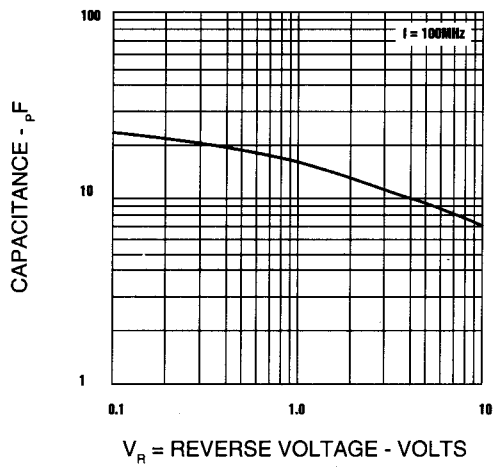
**FIGURE OF MERIT  
VERSUS FREQUENCY**



**FIGURE OF MERIT  
VERSUS REVERSE VOLTAGE**



**CAPACITANCE VERSUS  
REVERSE VOLTAGE**



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