

1N34A Point Contact Germanium Diode

Description:

The 1N34A is a point contact diode in a DO7 type package employing N-form Germanium and gives an efficient and excellent linearity when used in TV image detection, FM detection, radio AM detection, etc.

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Peak Inverse Voltage, Repetitive ($I_R = 1\text{mA}$), P_{IV}	65V
Reverse Voltage DC, V_R	20V
Peak Forward Surge Current, Non-Repetitive ($t = 1\text{sec}$), I_{FSM}	0.5A
Peak Forward Surge Current, Repetitive, I_{FSR}	200mA
Average Rectified Output Current, I_O	50mA
Operating Junction Temperature, T_J	$+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+75^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage Drop	V_F	$I_F = 5\text{mA}$	–	–	1.0	V
Forward Current	I_F	$V_F = 1\text{V}$	4	–	–	mA
Reverse Current	I_R	$V_R = 10\text{V}$	–	–	30	μA
		$V_R = 50\text{V}$	–	–	500	μA
Junction Capacitance	C_j	$F = 1\text{MHz}$, $V = -1\text{V}$	–	–	1	pF
Rectification Efficiency	η	$V_i = 2V_{\text{rms}}$, $= 5\text{K}\Omega$, $C = 20\text{pF}$, $f = 40\text{MHz}$	55	–	–	%

