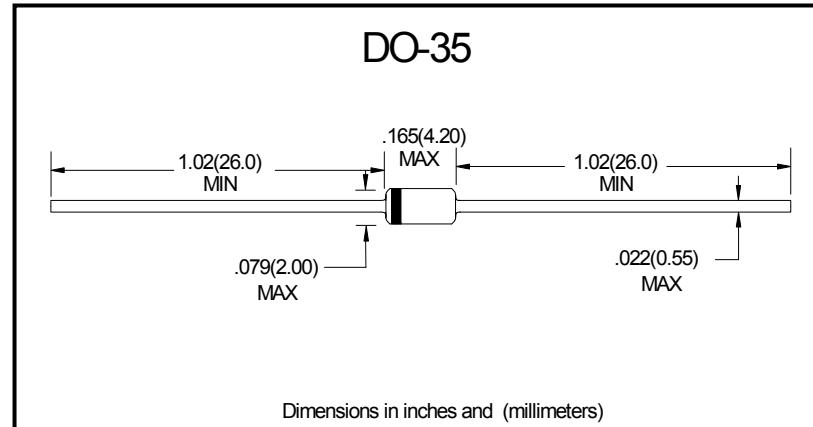


## Small Signal Fast Switching Diodes

## Features

- $V_R$  75V
- $I_{FAV}$  150mA

## Outline Dimensions and Mark



## Applications

- Extreme fast switches

## Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Max
Repetitive peak reverse voltage	$V_{RRM}$	V		100
Reverse voltage	$V_R$	V		75
Peak forward surge current	$I_{FSM}$	A	$t_p=1\mu s$	2
Repetitive peak forward current	$I_{FRM}$	mA		500
Forward continuous current	$I_F$	mA		300
Average forward current	$I_{FAV}$	mA	$V_R=0$	150
Power dissipation	$P_{tot}$	mW	$L=4mm, T_L=45^\circ C$	440
			$L=4mm, T_L \leq 25^\circ C$	500
Thermal resistance	$R_{thJA}$	°C/W	$L=4$ mm, $T_L =$ junction to ambient air, $L=4mm, T_L=\text{constant}$	350
Maximum junction temperature	$T_j$	°C		175
Storage temperature range	$T_{stg}$	°C		-65 to +175

$(T_a=25^\circ\text{C})$ Electrical Characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Item	Symbol	Unit	Conditions	Max
Forward voltage	$V_F$	mV	$I_F=200\text{mA}$	1000
Reverse current	$I_R$	nA	$V_R=20\text{V}$	25
	$I_R$	$\mu\text{A}$	$V_R=20\text{V}, T_j=150^\circ\text{C}$	50
	$I_R$	$\mu\text{A}$	$V_R=75\text{V}$	5
Breakdown voltage	$V_{(BR)}$	V	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	100(min)
Diode capacitance	$C_D$	pF	$V_R=0, f=1\text{MHz}, V_{HF}=50\text{mV}$	4
Reverse recovery time	$t_{rr}$	ns	$I_F=I_R=10\text{mA}, i_R=1\text{mA}$	8
	$t_{rr}$	ns	$I_F=10\text{mA}, V_R=6\text{V}, i_R=0.1 \times I_R, R_L=100\Omega$	4

## Characteristics(Typical)

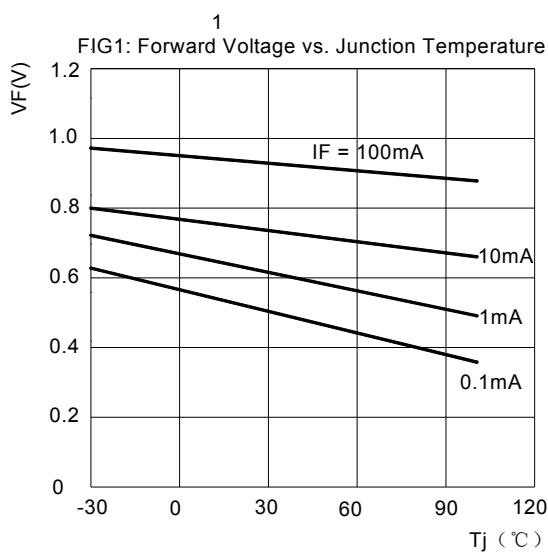


图3: 反向电流与反向电压的关系

