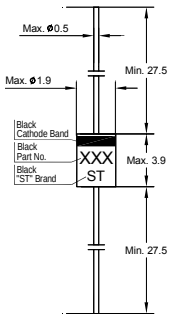
1N916, 1N916A, 1N916B

Silicon Epitaxial Planar Switching Diode



Glass Case DO-35
Dimensions in mm

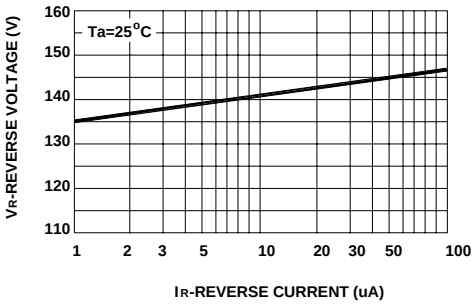
Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Maximum Repetitive Reverse Voltage		V_{RRM}	100	V
Average Rectified Current		$I_{F(AV)}$	200	mA
Peak Forward Surge Current	at t = 1 s at t = 1 µs	I_{FSM}	1 4	A
Total Power Dissipation		P_{tot}	500	mW
Junction Temperature		T_j	175	°C
Storage Temperature Range		T_{stg}	- 65 to + 200	°C

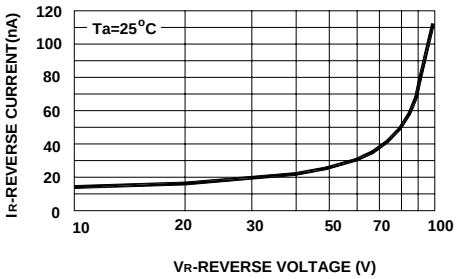
Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA at I_R = 5 µA		$V_{(BR)R}$	 100 75	 - -	 V
Reverse Current at V_R = 20 V at V_R = 75 V at V_R = 20 V, T_j = 150 °C		I_R	 - - -	 25 5 50	 nA µA µA
Forward Voltage at I_F = 5 mA at I_F = 10 mA at I_F = 20 mA at I_F = 30 mA	 1N916B 1N916 1N916A 1N916B	 V_F V_F V_F V_F	 0.63 - - -	 0.73 1 1 1	 V V V V
Total Capacitance at V_R = 0, f = 1 MHz		C_T	-	2	pF
Reverse Recovery Time at I_F = 10 mA, V_R = 6 V (60 mA), I_{RR} = 1 mA, R_L = 100 Ω		t_{rr}	-	4	ns

REVERSE VOLTAGE vs REVERSE CURRENT
BV-1.0 to 100 uA

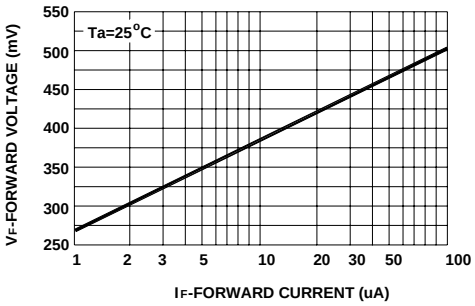


REVERSE CURRENT vs REVERSE VOLTAGE
IR-10 to 100 V

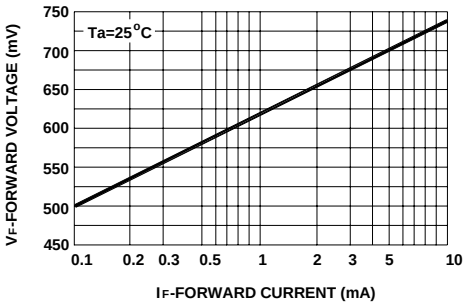


GENERAL RULE:The Reverse Current of a diode will approximately double for every ten (10) Degree C increase in Temperature

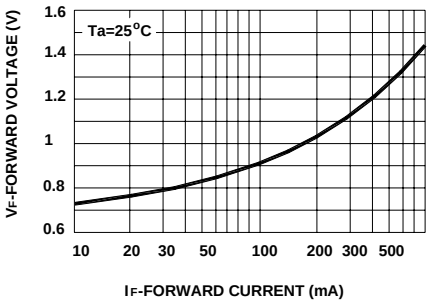
FORWARD VOLTAGE vs FORWARD CURRENT
VF-1 to 100 uA



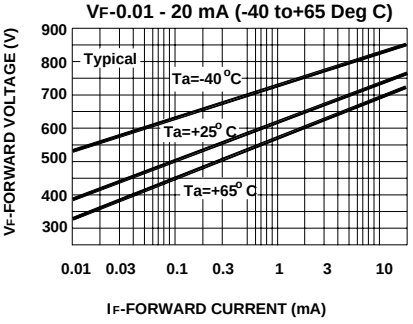
FORWARD VOLTAGE vs FORWARD CURRENT
VF-0.1 to 100 mA



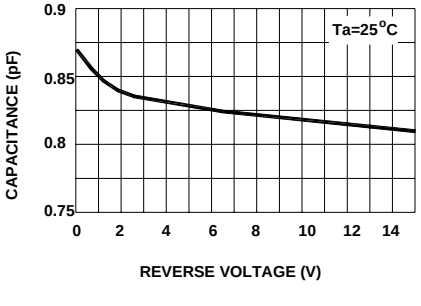
FORWARD VOLTAGE vs FORWARD CURRENT
VF-10 to 800 mA



FORWARD VOLTAGE vs
AMBIENT TEMPERATURE
VF-0.01 - 20 mA (-40 to+65 Deg C)



CAPACITANCE vs REVERSE VOLTAGE
VR=0.0 to 15 V



REVERSE RECOVERY TIME vs
REVERSE CURRENT