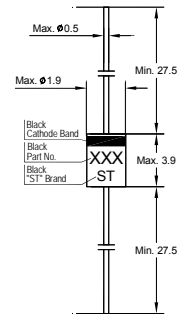


1N916, 1N916A, 1N916B

Silicon Epitaxial Planar Switching Diode



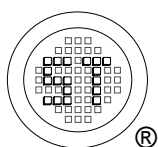
Glass Case DO-35
Dimensions in mm

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

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

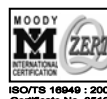
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

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



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ISO/TS 16949:2002
Certificate No. 08103

ISO 14001:2004
Certificate No. 7116

ISO 9001:2000
Certificate No. 080058

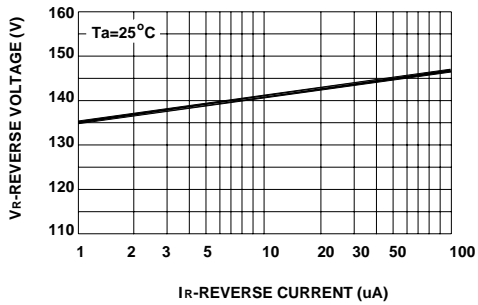
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Certificate No. 7116

IECQ QC 080000
Certificate No. 080000

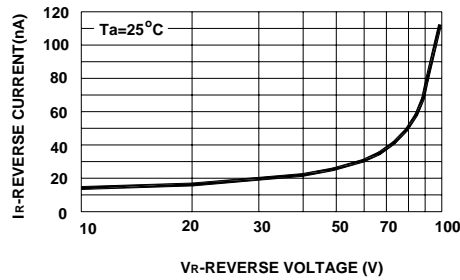
Dated : 15/06/2009

1N916, 1N916A, 1N916B

REVERSE VOLTAGE vs REVERSE CURRENT
BV-1.0 to 100 uA

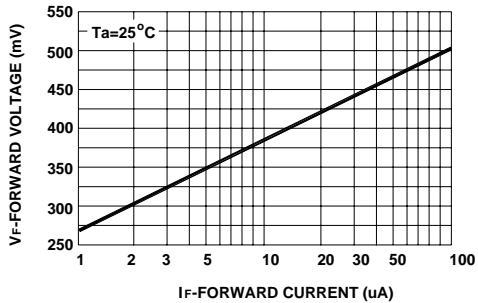


REVERSE CURRENT vs REVERSE VOLTAGE
IR-10 to 100 V

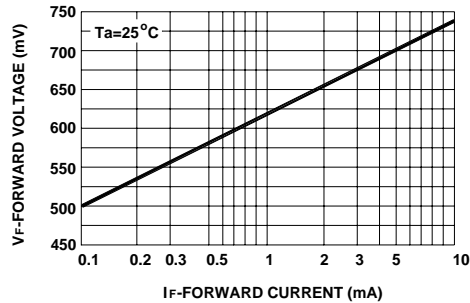


GENERAL RULE: The Reverse Current of a diode will approximately double for every ten (10) Degree C increase in Temperature

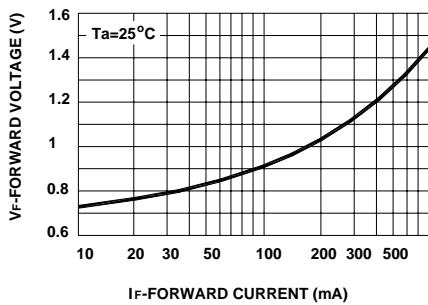
FORWARD VOLTAGE vs FORWARD CURRENT
VF-1 to 100 uA



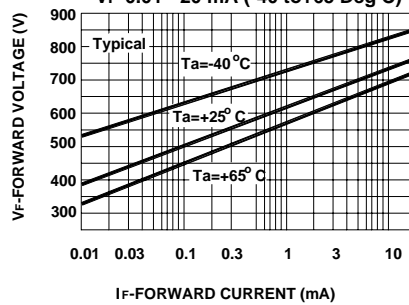
FORWARD VOLTAGE vs FORWARD CURRENT
VF-0.1 to 100 mA



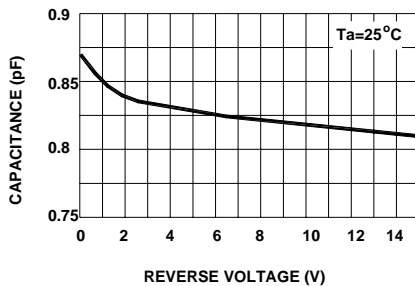
FORWARD VOLTAGE vs FORWARD CURRENT
VF-10 to 800 mA



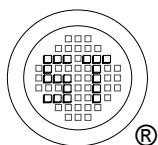
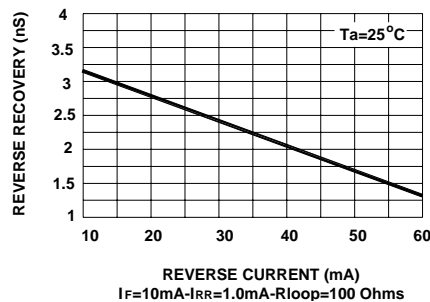
FORWARD VOLTAGE vs AMBIENT TEMPERATURE
VF-0.01 - 20 mA (-40 to +65 Deg C)



CAPACITANCE vs REVERSE VOLTAGE
VR=0.0 to 15 V



REVERSE RECOVERY TIME vs REVERSE CURRENT



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