

New Jersey Semi-Conductor Products, Inc.

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1N4933 thru 1N4937

FAST RECOVERY
RECTIFIERS

50-600 VOLTS
1 AMPERE



*MAXIMUM RATINGS								
Rating	Symbol	1N4933	1N4934	1N4935	1N4936	1N4937	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	Volts	
Working Peak Reverse Voltage	V _{RWM}							
DC Blocking Voltage	V _R							
Nonrepetitive Peak Reverse Voltage	V _{RSM}	75	150	250	450	650	Volts	
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	Volts	
Average Rectified Forward Current (Single phase, resistive load, T _A = 75°C)	I _O	← 1.0 →						Amp
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions)	I _{FSM}	← 30 →						Amps
Operating Junction Temperature Range	T _J	← -65 to +150 →						°C
Storage Temperature Range	T _{stg}	← -65 to +175 →						°C

*THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient (Typical Printed Circuit-Board Mounting)	R _{θJC}	65	°C/W

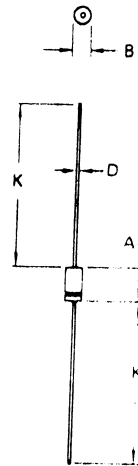
*ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
*Instantaneous Forward Voltage (I _F = 3.14 Amp, T _J = 150°C)	V _F	-	1.0	1.2	Volts
Forward Voltage (I _F = 1.0 Amp, T _A = 25°C)	V _F	-	1.0	1.1	Volts
*Reverse Current (Rated dc Voltage) T _A = 25°C	I _R	-	1.0	5.0	μA
T _A = 100°C		-	50	100	

*REVERSE RECOVERY CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time (I _F = 1.0 Amp to V _R = 30 Vdc) (Figure 21)	t _{rr}	-	150	200	ns
(I _{FM} = 15 Amp, di/dt = 10A/μs) (Figure 22)		-	175	300	
Reverse Recovery Current (I _F = 1.0 Amp to V _R = 30 Vdc) (Figure 21)	I _{RM(REC)}	-	1.0	2.0	Amp

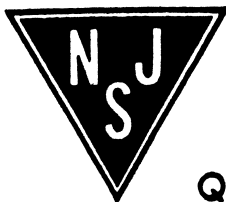
*Indicates JEDEC Registered Data



NOTES:

1. ALL RULES AND NOTES ASSOCIATED WITH JEDEC DD 41 OUTLINE SHALL APPLY
2. POLARITY DENOTED BY CATHODE BAND
3. LEAD DIAMETER NOT CONTROLLED WITHIN "D" DIMENSION

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.97	6.60	0.235	0.260
B	2.79	3.05	0.110	0.120
D	0.76	0.86	0.030	0.034
K	27.94	-	1.100	-



Quality Semi-Conductors