

SENSITRON

SEMICONDUCTOR

1N4942 to 1N4948

TECHNICAL DATA
DATA SHEET 5109, REV -

SJ
SX
SV

FAST RECOVERY RECTIFIERS

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

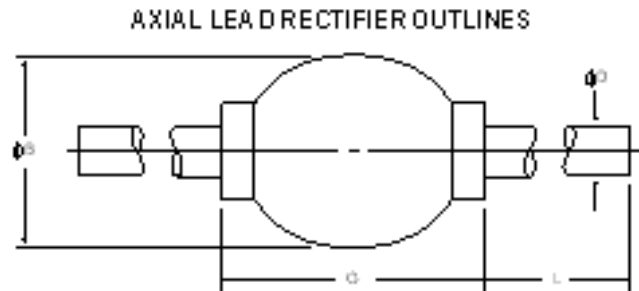
RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV) 1N4942 1N4944 1N4946 1N4947 1N4948	-	-	-	200 400 600 800 1000	Vdc
Average DC Output Current (I_o)	$T_A = +55^\circ\text{C}$	-	-	1.0	Amps
Peak Single Cycle Surge Current (I_{fsm})	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	15	Amps(pk)
Operating and Storage Temp. (T_{op} & T_{stg})	-	-65	-	+175	$^\circ\text{C}$
Maximum Forward Voltage (V_f)	$I_f = 1\text{A}$ (300 μsec pulse, duty cycle < 2%)		-	1.3	Volts
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	1.0 200	μAmps
Reverse Recovery Time (t_{rr}) 1N4942 1N4944 1N4946 1N4947 1N4948	$I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$	-	-	150 150 250 250 500	Nsec
Thermal Resistance (θ_{JL})	$d = 0.375"$	-	-	38	$^\circ\text{C/W}$

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Note: Cathode side of device is indicated by a dark band marked on body.

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	ΦB	ΦD	G	L
103	.065/.150 1.65/3.81	.027/.033 .69/.84	.140/.250 3.56/6.35	1.0/1.50 25.4/38.1

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