

1N5550-1N5554

High-reliability discrete products and engineering services since 1977

STANDARD RECOVERY RECTIFIERS

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Junction Temperature:-65°C to +200°CStorage Temperature:-65°C to +175°CThermal Resistance:22°C/W junction to lead @ 3/8" lead length from bodyThermal Impedance:-1.5°C/W ms heating timeAverage Rectified Forward Current (l_o):5 Amps @ T_ = 55°C (see Note 1)Forward Surge Current (8.3 ms half sine):100 AmpsSolder Temperatures:260°C for 10 s (maximum)		
Storage Temperature:-65°C to +175°CThermal Resistance:22°C/W junction to lead @ 3/8" lead length from bodyThermal Impedance:1.5°C/W ms heating timeAverage Rectified Forward Current (I₀):5 Amps @ T_ = 55°C (see Note 1)Forward Surge Current (8.3 ms half sine):100 AmpsSolder Temperatures:260°C for 10 s (maximum)	Junction Temperature:	-65°C to +200°C
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Thermal Impedance:1.5°C/W ms heating timeAverage Rectified Forward Current (I_o):5 Amps @ T_L = 55°C (see Note 1)Forward Surge Current (8.3 ms half sine):100 AmpsSolder Temperatures:260°C for 10 s (maximum)	Thermal Resistance:	22°C/W junction to lead @ 3/8" lead length from body
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Solder Temperatures:260°C for 10 s (maximum)	Forward Surge Current (8.3 ms half sine):	100 Amps
	Solder Temperatures:	260°C for 10 s (maximum)

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Туре	Minimum Breakdown Voltage V _{BR} @ 50μA	Working Peak Reverse Voltage V _{RWM}	Average Rectified Current Io1 @ T _L = +55°C Note 1	Average Rectified Current I ₀₂ @ T _A = +55°C Note 2	Forward Voltage V _F @ 9A (pk)		Maximum	Reverse
					Min.	Max.	Reverse Current I _R @ V _{RWM}	Recovery t _{rr} Note 3
	VOLTS	VOLTS	AMPS	AMPS	VOLTS	VOLTS	μΑ	μs
1N5550	220	200	5	3	0.6V(pk)	1.2V(pk)	1.0	2.0
1N5551	440	400	5	3	0.6V(pk)	1.2V(pk)	1.0	2.0
1N5552	660	600	5	3	0.6V(pk)	1.2V(pk)	1.0	2.0
1N5553	880	800	5	3	0.6V(pk)	1.3V(pk)	1.0	2.0
1N5554	1100	1000	5	3	0.6V(pk)	1.3V(pk)	1.0	2.0

Note 1: Rated at T_L = 55°C at L = 0.375" from body. Derate linearly at 41.6 mA/°C above T_L = 55°C.

Note 2: Derate linearly at 25 mA/*C above $T_A = 55^{\circ}$ C. This rating is typical for PC boards where thermal resistance from mounting point to ambient is sufficiently controlled where $T_{J(MAK)}$ rating is not exceeded.

Note 3: I_{F} = 0.5 A, I_{RM} = 1.0 A, $I_{\text{R(REC)}}$ = .250 A



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MECHANICAL CHARACTERISTICS

Case:	Digi Y
Marking:	Body painted, alpha-numeric
Polarity:	Cathode band



	Digi Y							
	Inc	hes	Millimeters					
	Min	Max	Min	Max				
BD	0.115	0.180	2.920	4.570				
BL	0.130	0.300	3.300	7.620				
LD	0.036	0.042	0.920	1.070				
LL	0.900	1.300	22.860	33.020				

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