

3N253-3N259

GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER

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

Rating	Symbol	3N253	3N254	3N255	3N256	3N257	3N258	3N259	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward output rectified current at $T_A = 50^\circ\text{C}$	$I_{F(AV)}$	2.0							Amps
Peak forward surge current single half-sine wave superimposed on rated load $T_J = 150^\circ\text{C}$	I_{FSM}	60.0							Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	15.0							A^2s
Typical thermal resistance per leg ⁽¹⁾	$R_{\theta JA}$	30.0							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	11.0							
Operating and storage temperature range	T_J, T_{stg}	-55 to +165							$^\circ\text{C}$

Note 1: Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.47 x 0.47" copper pads.

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$)

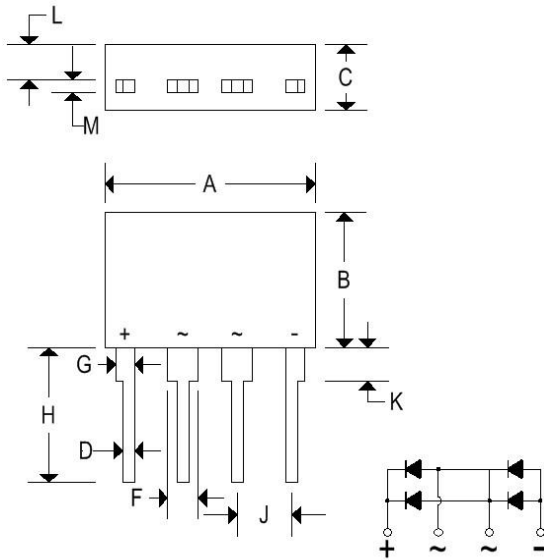
Characteristic	Symbol	3N253	3N254	3N255	3N256	3N257	3N258	3N259	Units
Maximum instantaneous forward voltage drop per leg at 3.14A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	5							μA
		500							
Typical junction capacitance	C_J	25							pF

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MECHANICAL CHARACTERISTICS

Case:	Digi M
Marking:	Body painted, alpha-numeric
Pin out:	See below



	Digi M			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.580	0.620	14.732	15.748
B	0.360	0.400	9.144	10.160
C	0.185	0.195	4.699	4.953
D	0.025	0.035	0.635	0.889
F	0.080	0.090	2.032	2.286
G	0.040	0.055	1.016	1.397
H	0.390	0.430	9.906	10.922
J	0.145	0.160	3.683	4.064
K	0.080	0.090	2.032	2.286
L	0.090	0.110	2.286	2.794
M	0.025	0.035	0.635	0.889

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