

DIGITRON SEMICONDUCTORS

MR850-MR856

3A SCHOTTKY RECTIFIER

MAXIMUM RATINGS

Rating	Symbol	MR850	MR851	MR852	MR854	MR856	Unit	
Peak repetitive reverse voltage	V_{RRM}							
Working peak reverse voltage	V_{RWM}	50	100	200	400	600	V	
DC blocking voltage	V_R							
Non-repetitive peak reverse voltage	V_{RSM}	75	150	250	450	650	V	
RMS reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	V	
Average rectified forward current (single phase resistive load)	I_O	3.0 @ $T_A = 80^\circ\text{C}$						A
Non-repetitive peak surge current (surge applied at rated load conditions)	I_{FSM}	100						A
Operating junction temperature range	T_J	-65 to +125						$^\circ\text{C}$
Storage junction temperature range	T_{stg}	-65 to +150						$^\circ\text{C}$
Maximum thermal resistance Junction to ambient	$R_{\theta JA}$	28						$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage ($I_F = 3.0\text{A}$, $T_J = 25^\circ\text{C}$)	V_F	-	1.04	1.25	V
Reverse current (rated dc voltage) $T_J = 25^\circ\text{C}$	I_R	-	2.0	10	μA
Reverse current (rated dc voltage) $T_J = 80^\circ\text{C}$					
MR850		-	-	150	
MR851		-	60	150	
MR852	I_R	-	-	200	μA
MR854		-	-	250	
MR856		-	100	300	
Reverse recovery time ($I_F = 1.0\text{A}$ to $V_R = 30\text{Vdc}$) ($I_F = 15\text{A}$, $di/dt = 10\text{A}/\mu\text{s}$)	t_{rr}	-	100 150	200 300	ns
Reverse recovery current ($I_F = 1.0\text{A}$ to $V_R = 30\text{Vdc}$)	$I_{RM(REC)}$	-	-	2.0	A

Note 1: Pulse test: Pulse width = 300 μs , duty cycle = 2.0%.

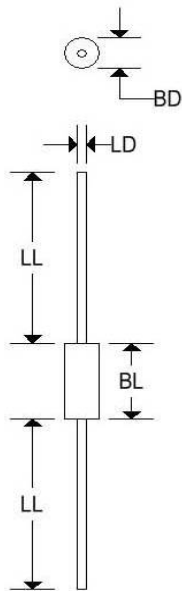
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MECHANICAL CHARACTERISTICS

Case	DO-201A
Marking	Body painted, alpha-numeric
Polarity	Cathode band



	DO-201A			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.190	0.260	4.826	6.604
BL	0.285	0.375	7.240	9.530
LD	0.048	0.052	1.219	1.321
LL	1.000	-	25.400	-

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.