

# DIGITRON SEMICONDUCTORS

MC5610-MC5619

FAST RECOVERY SILICON RECTIFIERS

## MAXIMUM RATINGS

Parameter	MC5610-MC5612	MC5613-MC5616	MC5617-MC5619
Operating temperature range	-55° to 150°C	-65° to +150°C	-65° to +125°C
Storage temperature range	-65° to +175°C		
Thermal resistance	38°C/W junction to lead at 3/8" lead length from body		
Solder temperature	260°C for 10 s maximum		

## ELECTRICAL CHARACTERISTICS

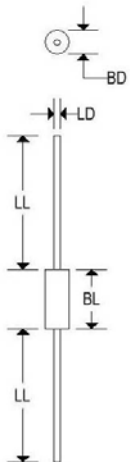
Part number	Working peak reverse voltage	RMS voltage	Average rectified current <sup>(2)</sup>		Maximum forward voltage	Maximum reverse current	Maximum reverse current	Maximum forward surge	Maximum reverse recovery time <sup>(1)</sup>
	$V_{RWM}$	$V_{R(RMS)}$	@ $T_L = 55^\circ\text{C}$	@ $T_L = 100^\circ\text{C}$	$V_F @ 100\text{mA}$	$I_R @ V_{RWM}$	$I_R @ V_{RWM}$	@ 8.3 ms	$t_{rr}$
	Volts	Volts	mA	mA		Volts	$\mu\text{A}$ @ 25°C		
MC5610	1500	1050	790	415	3.0	1.0	25	8	300
MC5611	2000	1400	630	330	4.0	1.0	25	6	300
MC5612	2500	1750	530	280	5.0	1.0	25	5	300
MC5613	1500	1050	975	515	3.0	1.0	20	8	300
MC5614	2000	1400	790	415	4.0	1.0	20	6	300
MC5615	2500	1750	665	350	5.0	1.0	20	5	300
MC5616	3000	2100	570	300	6.0	1.0	20	4	300
MC5617	4000	2800	330	120	8.0	2.5	50	3	300
MC5618	4500	3150	300	110	9.0	2.5	50	2.7	300
MC5619	5000	3500	275	100	10.0	2.5	50	2.5	300

Note 1:  $I_F = 50\text{mA}$ ,  $I_{RM} = 100\text{mA}$ ,  $I_{R(REC)} = 25\text{mA}$ .

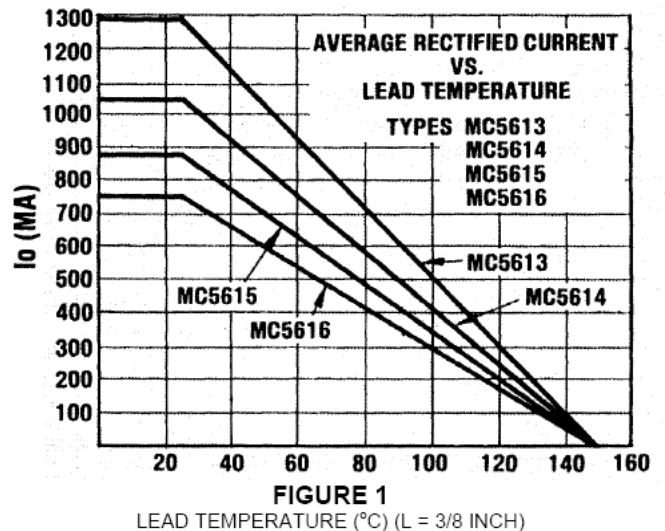
Note 2: Heat sink 3/8" from body.

## MECHANICAL CHARACTERISTICS

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



	Digi L			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.110	-	2.794
BL	-	0.235	-	5.969
LD	0.028	0.032	0.711	0.813
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.