

DIGITRON SEMICONDUCTORS

MBR1030CT-MBR1060CT

10A SCHOTTKY RECTIFIER

MAXIMUM RATINGS

Rating	MBR1030CT	MBR1035CT	MBR1040CT	MBR1045CT	MBR1050CT	MBR1060CT	Unit
Maximum recurrent peak reverse voltage	30	35	40	45	50	60	V
Maximum RMS voltage	21	24.5	28	31.5	35	42	V
Maximum DC blocking voltage	30	35	40	45	50	60	V
Operating temperature range	-55 to +150						°C
Storage temperature range	-55 to +175						°C

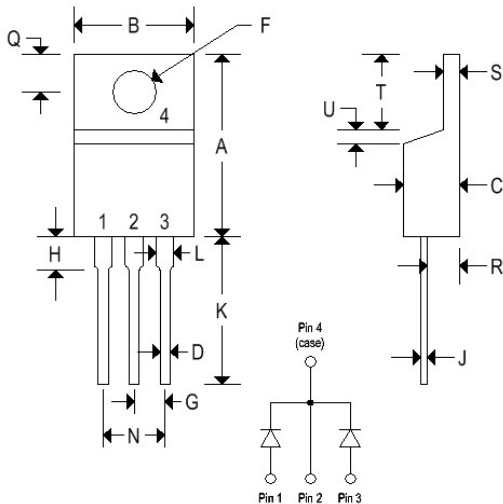
ELECTRICAL CHARACTERISTICS (@ 25°C unless otherwise noted)

Parameter	Symbol	Value	Test Condition
Average forward current	$I_{F(AV)}$	10A	$T_C = 105^\circ\text{C}$
Peak forward surge current	I_{FSM}	125A	8.3ms, half sine
Maximum forward voltage drop per element MBR1030CT-MBR1045CT MBR1050CT-MBR1060CT MBR1030CT-MBR1045CT MBR1050CT-MBR1060CT	V_F	0.70V 0.80V 0.57V 0.65V	$I_{FM} = 5A$ $T_J = 25^\circ\text{C}$ $I_{FM} = 5A$ $T_J = 125^\circ\text{C}$
Maximum DC reverse current at rated DC blocking voltage	I_R	0.1mA 15mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical junction capacitance MBR1030CT-MBR1045CT MBR1050CT-MBR1060CT	C_J	170pF 220pF	Measured at 1.0MHz, $V_R = 4.0V$

Pulse test : Pulse width 300µsec, duty cycle 2%.

MECHANICAL CHARACTERISTICS

Case	TO-220AB
Marking	Alpha-numeric
Pin out	See below



	TO-220AB			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.570	0.620	14.480	15.750
B	0.380	0.405	9.660	10.280
C	0.160	0.190	4.070	4.820
D	0.025	0.035	0.640	0.880
F	0.142	0.147	3.610	3.730
G	0.095	0.105	2.420	2.660
H	0.110	0.155	2.800	3.930
J	0.018	0.025	0.460	0.640
K	0.500	0.562	12.700	14.270
L	0.045	0.060	1.150	1.520
N	0.190	0.210	4.830	5.330
Q	0.100	0.120	2.540	3.040
R	0.080	0.110	2.040	2.790
S	0.045	0.055	1.150	1.390
T	0.235	0.255	5.970	6.470
U	-	0.050	-	1.270

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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.

