

MBR1030CT-MBR1060CT

10 AMP SCHOTTKY RECTIFIERS

High-reliability discrete products and engineering services since 1977

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	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 (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Test Condition
Average forward current	I _{F(AV)}	10A	T _c = 105°C
Peak forward surge current	I _{FSM}	125A	8.3ms, half sine
Maximum forward voltage drop per element			
MBR1030CT-MBR1045CT		0.70V	I _{FM} = 5A
MBR1050CT-MBR1060CT	V _F	0.80V	T _J = 25°C
MBR1030CT-MBR1045CT		0.57V	I _{FM} = 5A
MBR1050CT-MBR1060CT		0.65V	T _J = 125°C
Maximum DC reverse current at rated DC blocking voltage		0.1mA	T _J = 25°C
	I _R	15mA	T _J = 125°C
Typical junction capacitance			
MBR1030CT-MBR1045CT	CJ	170pF	Measured at 1.0MHz,
MBR1050CT-MBR1060CT		220pF	$V_R = 4.0V$

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



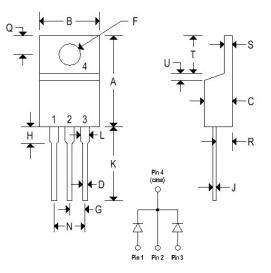
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MECHANICAL CHARACTERISTICS

Case	ТО-220АВ	
Marking	Alpha-numeric	
Pin out	Cathode band	



	TO-220AB					
	Inches		Millimeters			
	Min	Max	Min	Max		
Α	0.570	0.620	14.480	15.750		
В	0.380	0.405	9.660	10.280		
С	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		
Н	0.110	0.155	2.800	3.930		
J	0.018	0.025	0.460	0.640		
Κ	0.500	0.562	12.700	14.270		
L	0.045	0.060	1.150	1.520		
Ν	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		
Т	0.235	0.255	5.970	6.470		
U	-	0.050	-	1.270		



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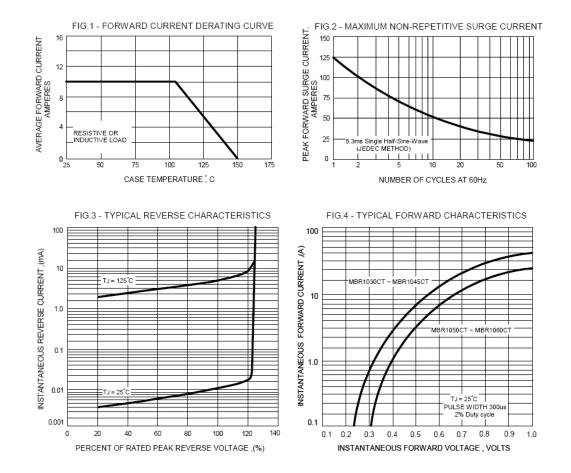


FIG.5 - TYPICAL JUNCTION CAPACITANCE

