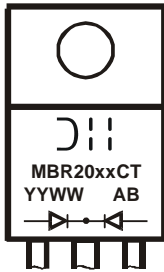
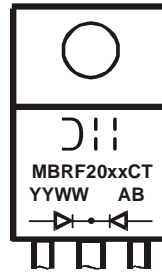


Marking Information



MBR20xxCT = Product Type Marking Code
AB = Foundry and Assembly Code
YYWW = Date Code Marking
YY = Last two Digits of Year (ex: 13 = 2013)
WW = Week (01 - 53)



MBRF20xxCT = Product Type Marking Code
AB = Foundry and Assembly Code
YYWW = Date Code Marking
YY = Last two Digits of Year (ex: 13 = 2013)
WW = Week (01 - 53)

Maximum Ratings (Per Leg) (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitance load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	45	V
DC Blocking Voltage	V _{RM}	60	
MBR2045CT / MBRF2045CT			
MBR2060CT / MBRF2060CT			
Average Rectified Output Current (Per Leg)	I _O	10	A
(Total)		20	
Non-Repetitive Peak Forward Surge Current 8.3ms	I _{FSM}	180	A
Single Half Sine-Wave Superimposed on Rated Load			

Thermal Characteristics (Per Leg)

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Case (Note 5)			
Package = TO-220AB	R _{θJC}	2	°C/W
Package = ITO-220AB		4	
Typical Thermal Resistance, Junction to Ambient (Note 5)			
Package = TO-220AB	R _{θJA}	15	°C/W
Package = ITO-220AB		25	
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics (Per Leg) (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
MBR2045CT / MBRF2045CT						
Forward Voltage Drop	V _F	—	0.58	0.64	V	I _F = 10A, T _J = +25°C
		—	—	0.57		I _F = 10A, T _J = +125°C
MBR2060CT / MBRF2060CT						
Forward Voltage Drop	V _F	—	0.75	0.81	V	I _F = 10A, T _J = +25°C
		—	—	0.69		I _F = 10A, T _J = +125°C
Leakage Current (Note 6)	I _R	—	—	0.1	mA	V _R = Rated V, T _J = +25°C
at Rated DC Blocking Voltage		—	—	15		V _R = Rated V, T _J = +125°C

Notes: 5. Device mounted on heat sink (45mm x 20mm x 12mm), with minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.
6. Short duration pulse test used to minimize self-heating effect.

MBR2045CT / MBRF2045CT

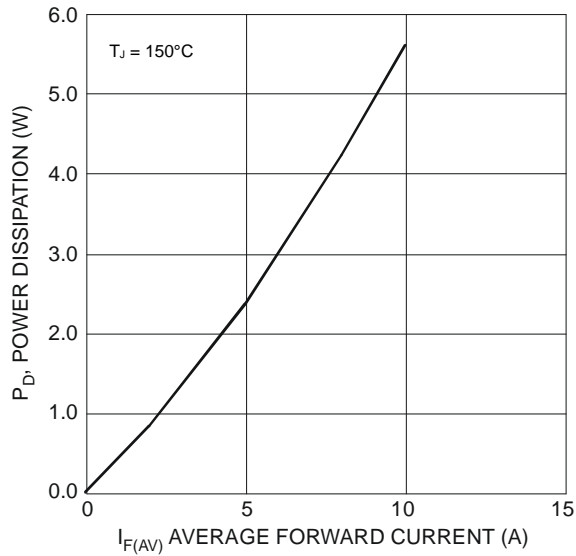


Figure 1 Forward Power Dissipation

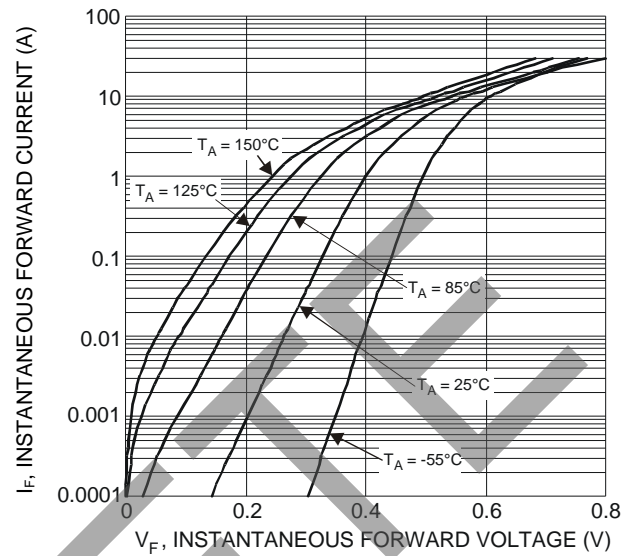


Figure 2 Typical Forward Characteristics

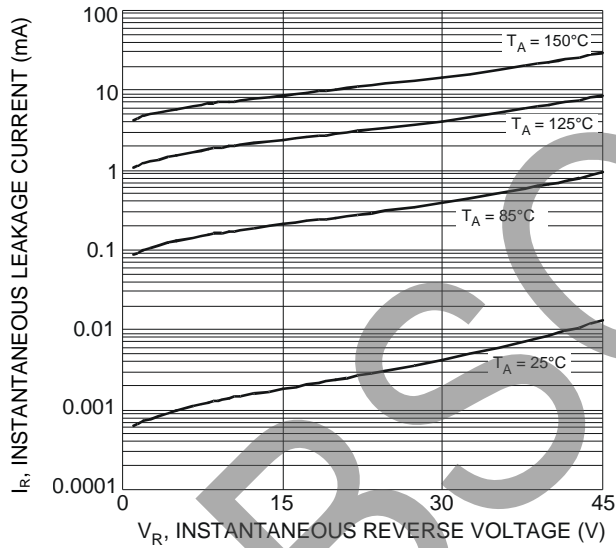


Figure 3 Typical Reverse Characteristics

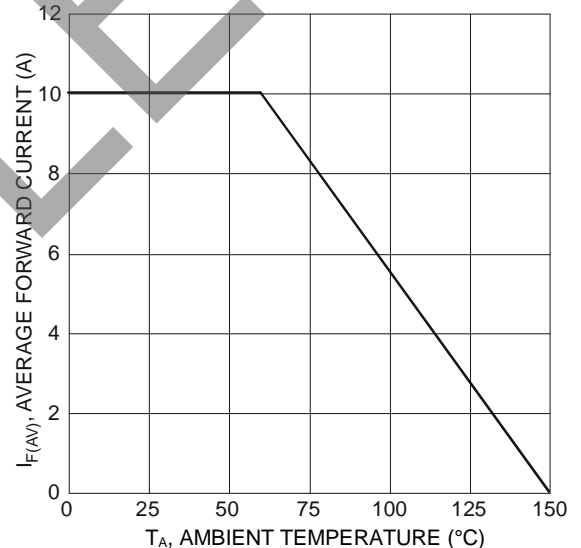


Figure 4 Forward Current Derating Curve

MBR2060CT / MBRF2060CT

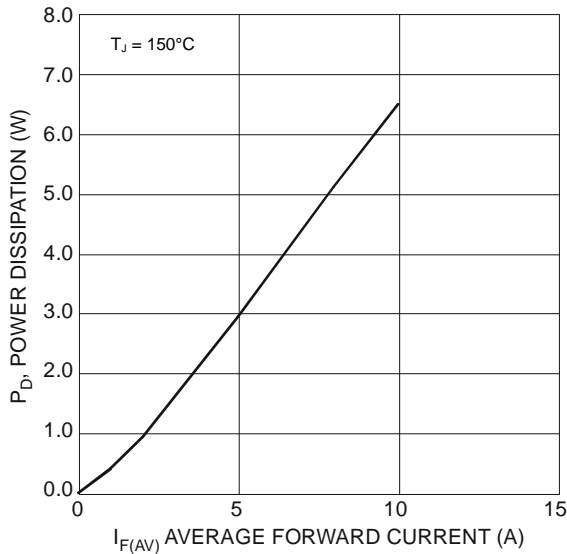


Figure 1 Forward Power Dissipation

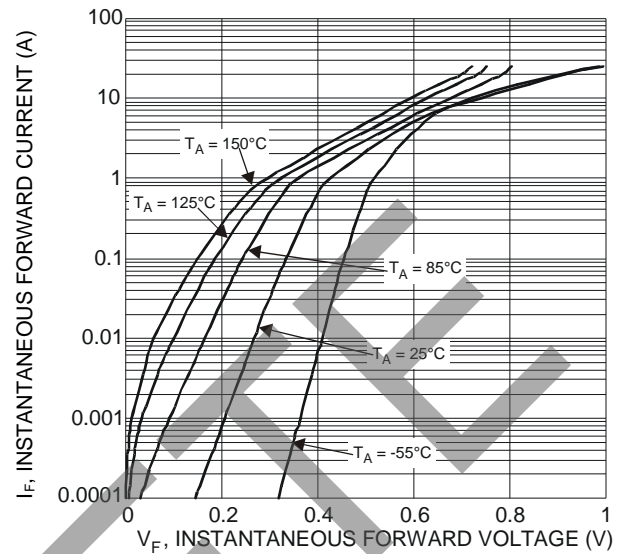


Figure 2 Typical Forward Characteristics

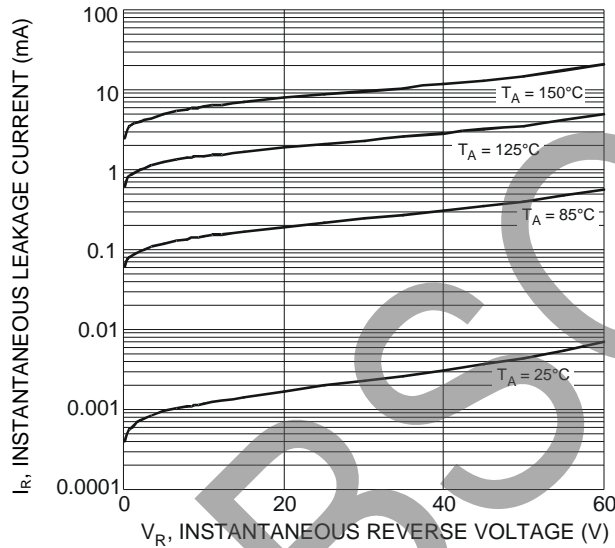


Figure 3 Typical Reverse Characteristics

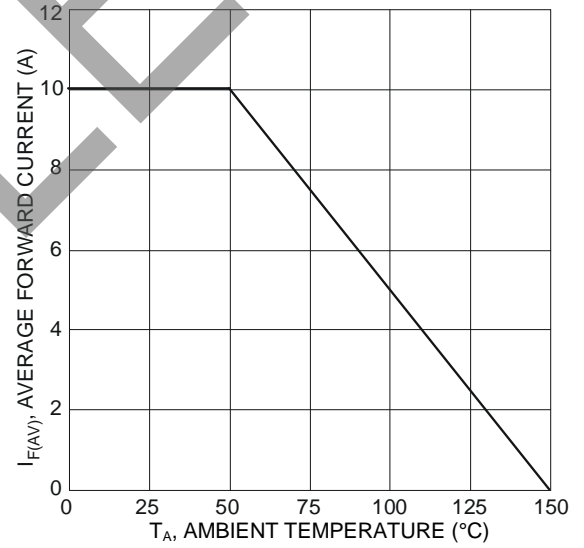
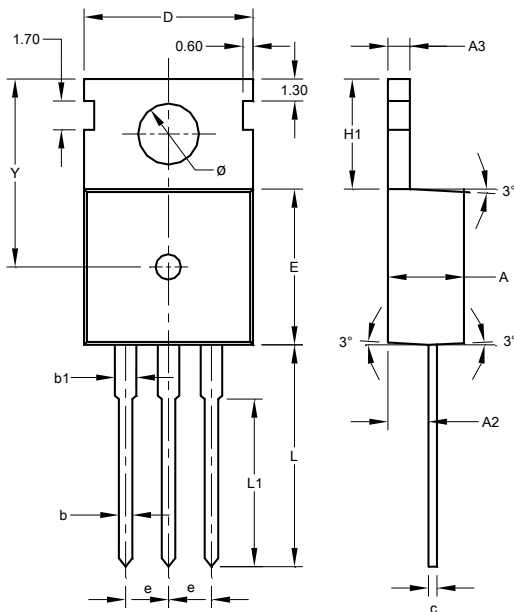


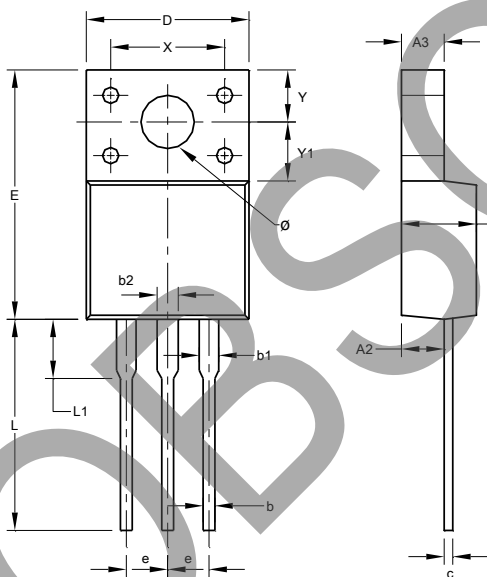
Figure 4 Forward Current Derating Curve

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.



TO220AB (Type C)			
Dim	Min	Max	Typ
A	4.40	4.60	4.500
A2	2.20	2.50	2.400
A3	1.20	1.40	1.300
b	0.700	0.900	-
b1	1.170	1.390	1.270
c	0.400	0.600	-
D	9.800	10.200	-
E	9.000	9.400	-
e	-	-	2.54
H1	6.300	6.700	-
L	12.600	13.600	-
L1	9.600	10.600	-
Y	-	-	11.100
Ø	3.560	3.640	-
All Dimensions in mm			



ITO220AB (TO220F-3)			
Dim	Min	Max	Typ
A	4.30	4.90	-
A2	2.52	2.92	-
A3	2.35	2.90	-
b	0.55	0.90	-
b1	1.00	1.40	-
b2	1.10	1.50	-
c	0.45	0.60	-
D	9.70	10.30	-
E	14.70	16.00	-
e	-	-	2.54
L	12.50	13.50	-
L1	2.79	4.50	-
X	6.90	7.10	-
Y	3.00	3.40	-
Y1	3.37	3.90	-
Ø	3.00	3.55	-
All Dimensions in mm			

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