

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Very Low Profile and Typical Height of 1.7 mm
- High Junction Temperature Capability
- Low Leakage Current

30 Amp Schottky Barrier Rectifiers 200 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V _{RWM}	200	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{RMS}	140	V
Average Rectified Forward Current			
Per Diode Per Device	I _{F(AV)}	15 30	А
Non-Repetitive Peak Surge Current (Per Diode) @8.3ms Half Sine Wave	I _{FSM}	260	А
Current Squared Time(Per Diode) @ 1ms≤t≤8.3ms	l²t	280	A ² s

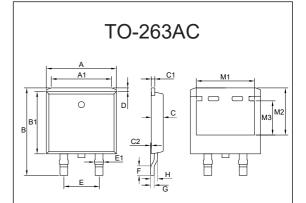
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbo	
2&4	Cathode	4		
1&3	Anode	MCC	1 •—	
		MBRBF30200CT	3 0 2&4	
		1 3		

Note:

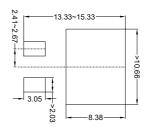
1.Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2.High temperature solder Exemption applied, see EU directive annex 7a.



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOIL
Α	0.388	0.407	9.85	10.35	
A1	0.323	0.339	8.20	8.60	
В	0.467	0.490	11.85	12.45	
B1	0.346	0.361	8.78	9.18	
С	0.062	0.074	1.57	1.87	
C1	0.014	0.026	0.35	0.65	
C2	0.000	0.008	0.00	0.20	
D	0.015	0.027	0.39	0.69	
E	0.196	0.204	4.98	5.18	
E1	0.044	0.056	1.12	1.42	
F	0.051	0.059	1.30	1.50	
G	0.014	0.026	0.35	0.65	
Н	0.033	0.049	0.85	1.25	
M1	0.327	0.343	8.30	8.70	
M2	0.264	0.280	6.70	7.10	
МЗ	0.185	0.201	4.70	5.10	

Suggested Solder Pad Layout(mm)





Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _J	Operating Junction Temperature Range		-55		175	°C
T _{stg}	Storage Temperature Range		-55		175	°C
Rth _(J-C)	Thermal Resistance from Junction to Case			2		°C/W
Rth _(J-A)	Thermal Resistance from Junction to Ambient			40		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit	
	V _F	I _F =5A;T _J =25°C		0.74			
		I _F =5A;T _J =125°C		0.58	0.65		
Forward Voltage		I _F =10A;T _J =25°C		0.82		V	
Forward Voltage		I _F =10A;T _J =125°C		0.66	0.75		
		I _F =15A;T _J =25°C		0.88	0.93		
		I _F =15A;T _J =125°C		0.71	0.80		
Reverse Current	I _R	V _R =200V;T _J =25°C			0.01	mA	
		V _R =200V;T _J =125°C			10	IIIA	
Junction Capacitance	CJ	V _R =4V;f=1MHz;T _J =25°C		670		pF	

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Curve Characteristics

Fig. 1 - Forward Current Derating Curve

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Resistive or Inductive Load

0 25 50 75 100 125 150 175

Fig. 3 - Typical Forward Characteristics

Case Temperature (°C)

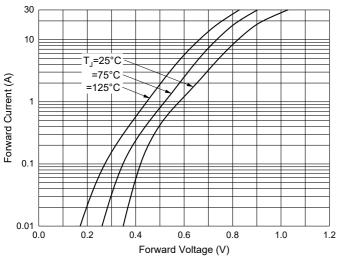


Fig. 5 - Typical Capacitance Characteristics

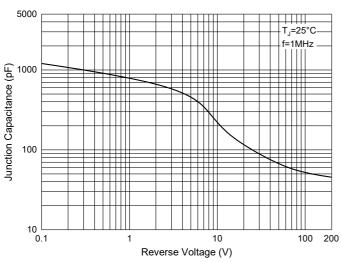


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

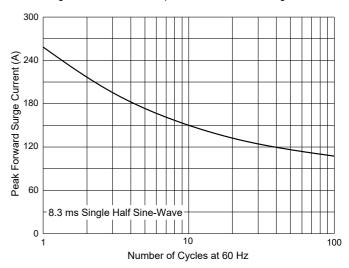
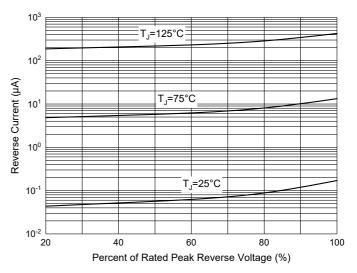


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel: 1500pcs/Reel	

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