

Features

- Halogen Free. "Green" Device (Note 1)
- Fully Automotive Qualified to AEC-Q101
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

10 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)}	5 10	А	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I _{FSM}	150	А	
Current Squared Time @ 1ms≤t≤8.3ms	I ² t	94	A ² s	

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol		
1,3	Anode	4			
2,4	Cathode	MCC MBRB10200CT YYWW	1 • 2,4		
			3 OHEATSINK		
		1 2 3 YYWW = Date Code			

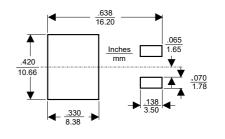
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

D²-PAK

DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.331	0.370	8.40	9.40		
В	0.378	0.417	9.60	10.60		
С	0.165	0.189	4.20	4.80		
D	0.027	0.037	0.68	0.94		
Е	0.045	0.055	1.14	1.40		
G	0.010		2.54		TYP.	
Ι	0.096	0.134	2.43	3.40		
J	0.011	0.025	0.28	0.64		
K	0.071	0.131	1.80	3.32		
S	0.575	0.625	14.60	15.87		
V	0.042	0.058	1.07	1.47		
W	0.000	0.010	0.00	0.25		

Suggested Solder Pad Layout





Thermal characteristics

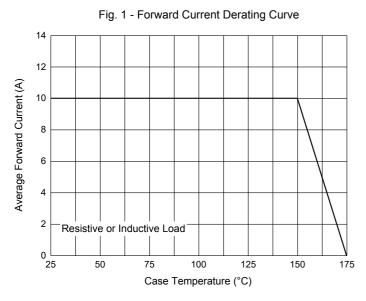
Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _J	Operating Junction Temperature Range		-55		175	°C
T _{stg}	Storage Temperature Range		-55		175	°C
Rth _(J-C)	Thermal Resistance from Junction to Case			2		°C/W

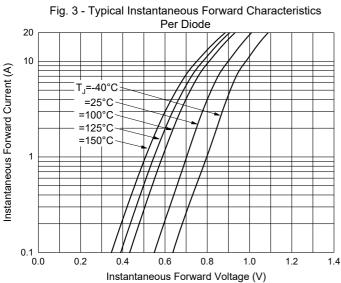
Electrical Characteristics @ 25°C Unless Otherwise Specified

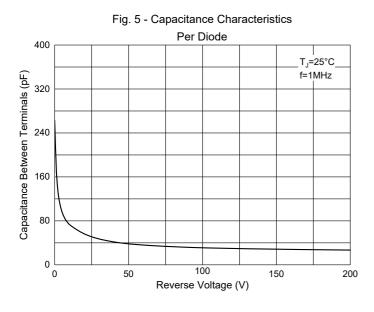
Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =5A;T _J =25°C		0.83	0.90	V
Per Diode		I _F =5A;T _J =125°C		0.70	0.80	V
Reverse Current	I _R	V _R =200V;T _J =25°C			10	uA
Per Diode		V _R =200V;T _J =125°C			2	mA
Junction Capacitance Per Diode	CJ	V_R =4V;f=1MHz; T_J =25°C		105		pF

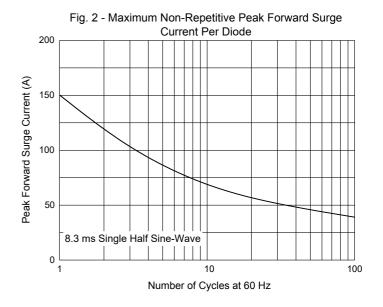


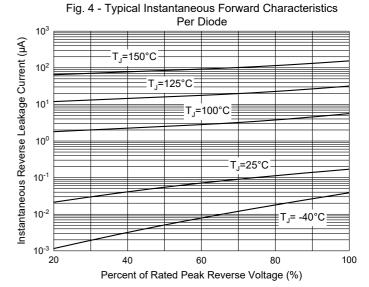
Curve Characteristics













Ordering Information

Device	Packing		
Part Number-TP	Tape&Reel: 800pcs/Reel		
Part Number-BP	Tube: 5Kpcs/Ctn		

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