

# **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)

# 30 Amp Schottky Barrier Rectifiers 200 Volts

# Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	200	V	
DC Blocking Voltage	V <sub>R</sub>			
RMS Reverse Voltage	V <sub>RMS</sub>	140	V	
Average Rectified Forward Current				
Per Diode Per Device	I <sub>F(AV)</sub>	15 30	А	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I <sub>FSM</sub>	250	А	
Current Squared Time @ 1ms≤t≤8.3ms	l <sup>2</sup> t	259	A <sup>2</sup> s	

# **Internal Structure**

Pin	Description	Simplified Outline	Graphic Symbol
1,3	Anode	4	
2,4	Cathode	MCC MBRB30200CT YYWW	1 •—▶ 2,4
			3 HEATSINK
		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.

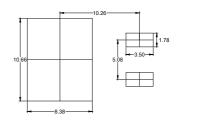
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

# D<sup>2</sup>-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	0.10		2.54		TYP.	
Н	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**

Unit:m





# **Thermal characteristics**

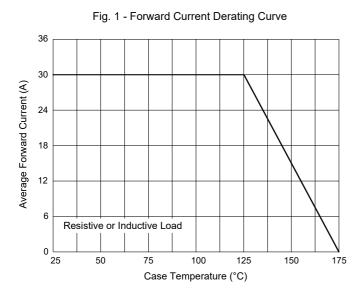
Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T <sub>J</sub>	Operating Junction Temperature Range		-55		175	°C
T <sub>stg</sub>	Storage Temperature Range		-55		175	°C
Rth <sub>(J-C)</sub>	Thermal Resistance from Junction to Case			2		°C/W

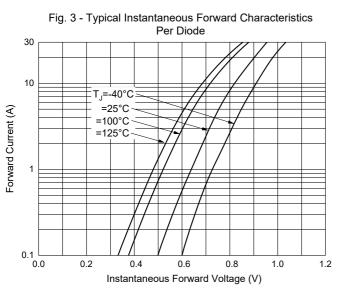
# Electrical Characteristics @ 25°C Unless Otherwise Specified

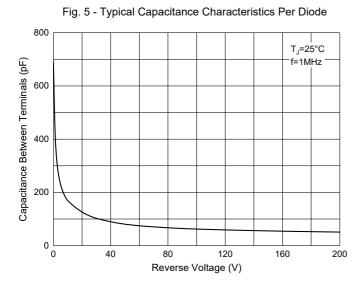
Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =15A;T <sub>J</sub> =25°C		0.85	0.90	V
Per Diode		I <sub>F</sub> =15A;T <sub>J</sub> =125°C		0.73	0.82	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =200V;T <sub>J</sub> =25°C			10	uA
Per Diode		V <sub>R</sub> =200V;T <sub>J</sub> =125°C			2	mA
Junction Capacitance Per Diode	CJ	$V_R$ =4V;f=1MHz; $T_J$ =25°C		250		pF

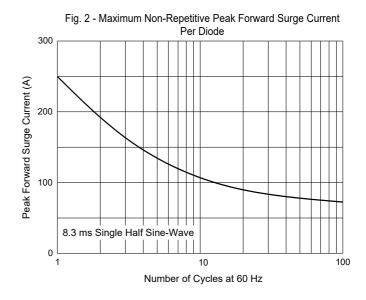


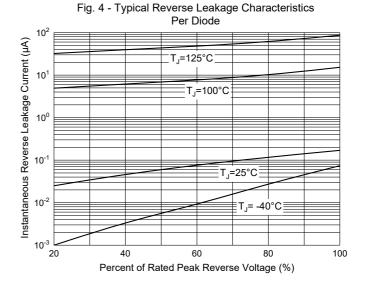
# **Curve Characteristics**













# **Ordering Information**

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

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