

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 100 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V _{RWM}	100	V	
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{RMS}	70	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}	120	А	
Current Squared Time @ 1ms≤t≤8.3ms	I ² t	60	A ² s	

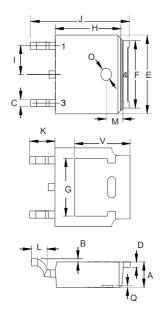
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol		
1,3	Anode	4			
2,4	Cathode	MCC MBRD10100CT	1		
		YYWW	3 OHHEATSINK		
		1 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.

(TO-252) DPAK



DIMENSIONS						
DIM	DIM INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.087	0.094	2.20	2.40		
В	0.000	0.005	0.00	0.13		
С	0.026	0.034	0.66	0.86		
D	0.018	0.023	0.46	0.58		
Е	0.256	0.264	6.50	6.70		
F	0.201	0.215	5.10	5.46		
G	0.190		4.83			
Н	0.236	0.244	6.00	6.20		
I	0.086	0.094	2.18	2.39		
J	0.386	0.409	9.80	10.40		
K	0.1	0.114		90		
L	0.055	0.067	1.40	1.70		
M	0.063		1.60			
0	0.043	0.051	1.10	1.30		
Q	0.000	0.012	0.00	0.30		
V	0.211		5.3	35		



Thermal characteristics

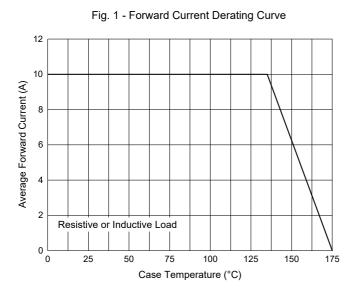
Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		175	°C
T _{stg}	Storage Temperature Range		-55		175	°C
Rth _(J-C)	Thermal Resistance from Junction to Case			5		°C/W

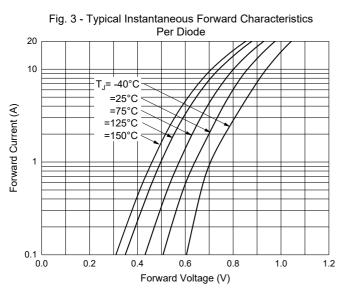
Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =5A;T _J =25°C		0.78	0.80	V
Per Diode		I _F =5A;T _J =125°C		0.64	0.70	V
Reverse Current	I _R	V _R =100V;T _J =25°C			10	uA
Per Diode		V _R =100V;T _J =125°C			500	uA
Junction Capacitance Per Diode	CJ	V_R =4V;f=1MHz; T_J =25°C		155		pF



Curve Characteristics





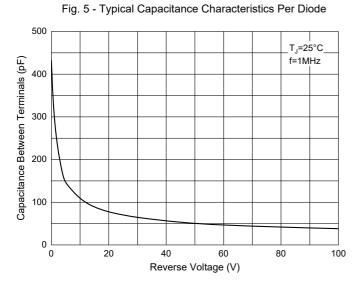


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current
Per Diode

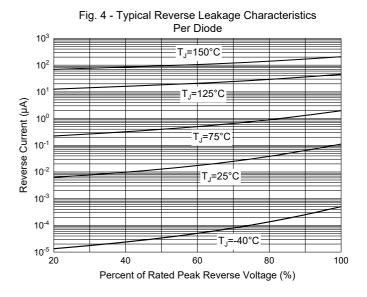
150

Q 120

8.3 ms Single Half Sine-Wave

100

Number of Cycles at 60 Hz



Rev.4-1-05082023



Ordering Information

Device	Packing		
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel		

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