

10A SCHOTTKY BARRIER RECTIFIER

General Description

MBRD10100CS Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Features

- Beautiful High Temperature Character
- Have Over Voltage protect loop , high reliability
- RoHS Compliant

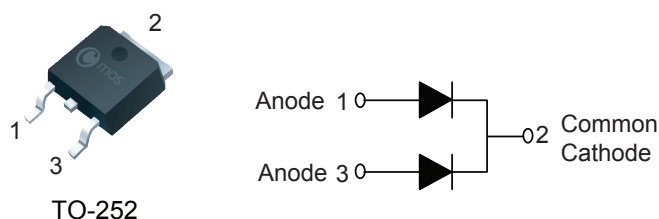
Product Summary

V_{RRM}	V_F	$I_{F(AV)}$
100V	0.88V	10A

Applications

- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit

TO-252 Pin Configuration



Type	Package	Marking
MBRD10100CS	TO-252	MBRD10100CS

Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	5 (Per Leg) 10 (Total)	A
I_{FSM}	Forward Peak Surge Current(Rated Load 8.3ms Half Mssine Wave-According to JEDEC Method)	120*2	A
T_J, T_{STG}	Operating and Storage Temperature Range	-40 to 150	°C

Thermal Data

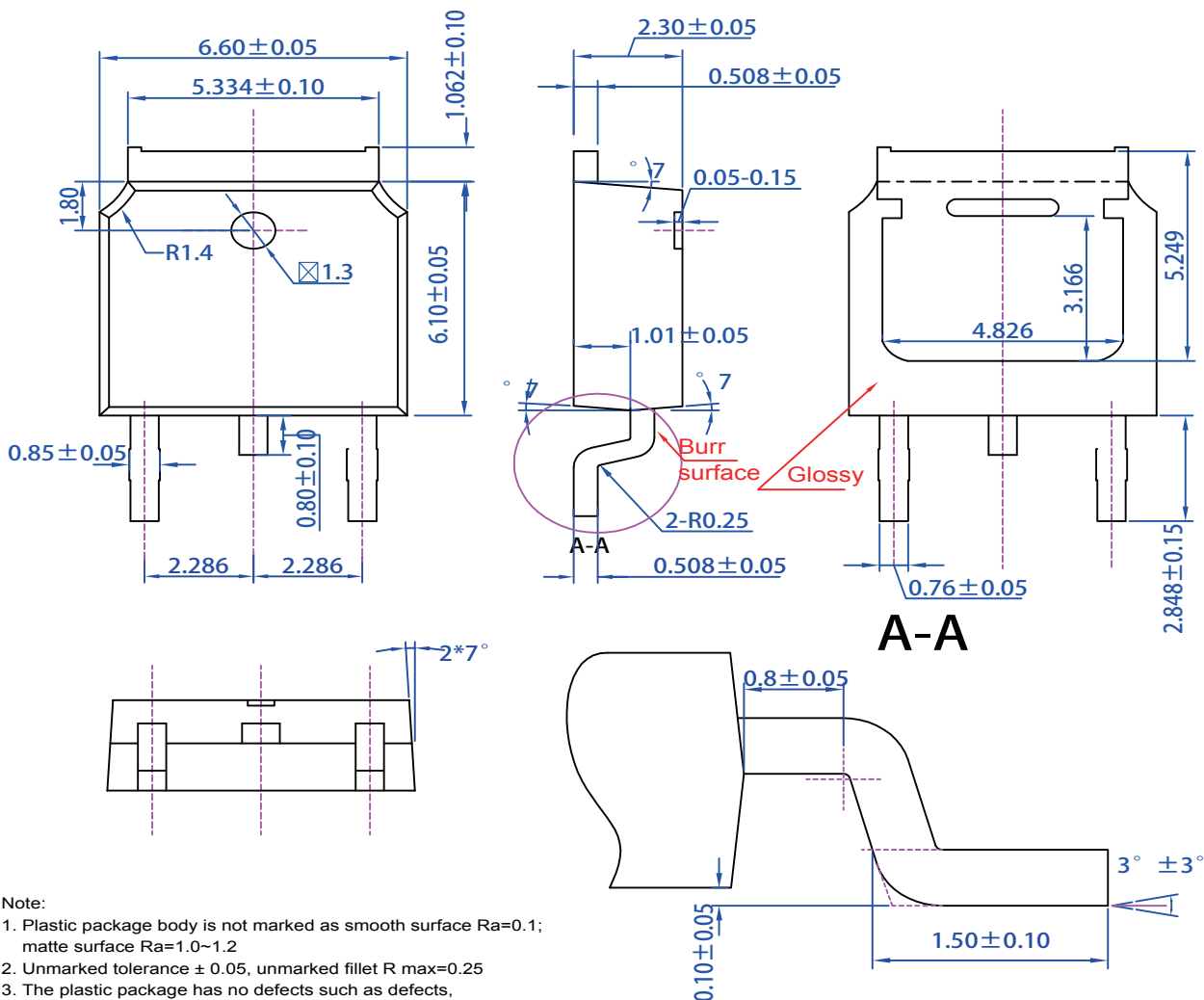
Symbol	Parameter	Typ.	Max.	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case(Per Leg)	3	---	°C/W

Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_F	Forward Voltage Drop per diode	$I_F=5A, T_J=25^{\circ}C (IFAV=5A*2)$	---	0.76	0.88	V
		$I_F=5A, T_J=125^{\circ}C (IFAV=5A*2)$	---	---	0.75	
I_R	Reverse Leakage Current per diode	$V_R=100V, T_J=25^{\circ}C$	---	---	0.05	mA
		$V_R=100V, T_J=125^{\circ}C$	---	---	10.00	mA

Package Dimensions

TO-252 Package Outline Drawing



Note:

1. Plastic package body is not marked as smooth surface $Ra=0.1$; matte surface $Ra=1.0\sim 1.2$
2. Unmarked tolerance ± 0.05 , unmarked fillet $R \max=0.25$
3. The plastic package has no defects such as defects, shrinkage holes, cracks, bubbles, etc.
4. Marking unit mm
5. The thimble hole is not allowed to protrude from the surface of the plastic package
6. Dislocation of upper and lower plastic package ≤ 0.05 ; plastic package center and lead Center misalignment of wire frames ≤ 0.05

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Cmos assumes no liability for customers' product design or applications.
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