

10A SCHOTTKY BARRIER RECTIFIER

General Description

MBRD1060CTLV Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Features

- Common Cathode
- Low Leakage Current
- RoHS Compliant
- High Junction Temperature Capability.
- High Current Capability, High Efficiency

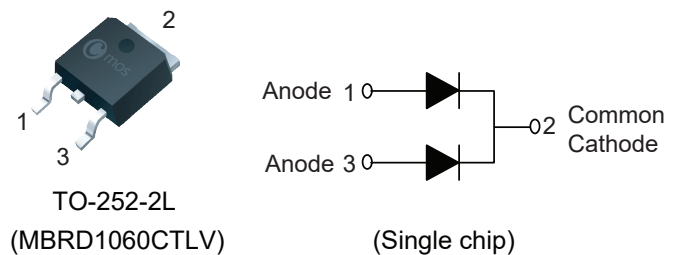
Product Summary

V _{RRM}	V _F	I _{F(AV)}
60V	0.49V	10A

Applications

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

TO-252-2L Pin Configuration



Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V _{RRM}	Peak Repetitive Reverse Voltage	60	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)	190x2	A
T _J	Operating Junction Temperature	125	°C
T _{STG}	Storage Temperature	-40 to 150	°C

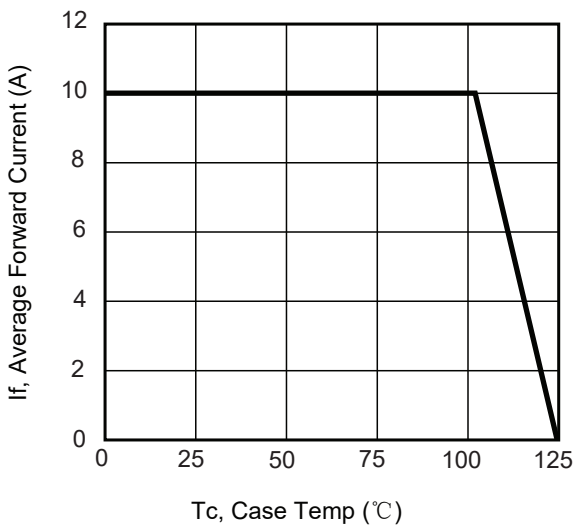
Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
R _{θJC}	Thermal Resistance, Junction to Case(Per Leg)	2	---	°C/W

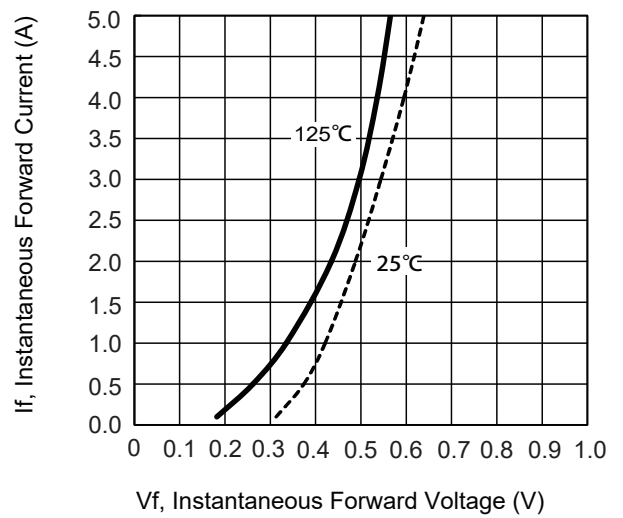
Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V _F	Forward Voltage Drop per diode	I _F =5A(I _{FAV} =10A×1), T _J =25°C	0.41	0.43	0.49	V
		I _F =5A(I _{FAV} =10A×1), T _J =125°C	---	---	0.65	
I _R	Reverse Leakage Current per diode	V _R =60V, T _J =25°C	---	---	0.05	mA
		V _R =60V, T _J =100°C	---	---	15	mA

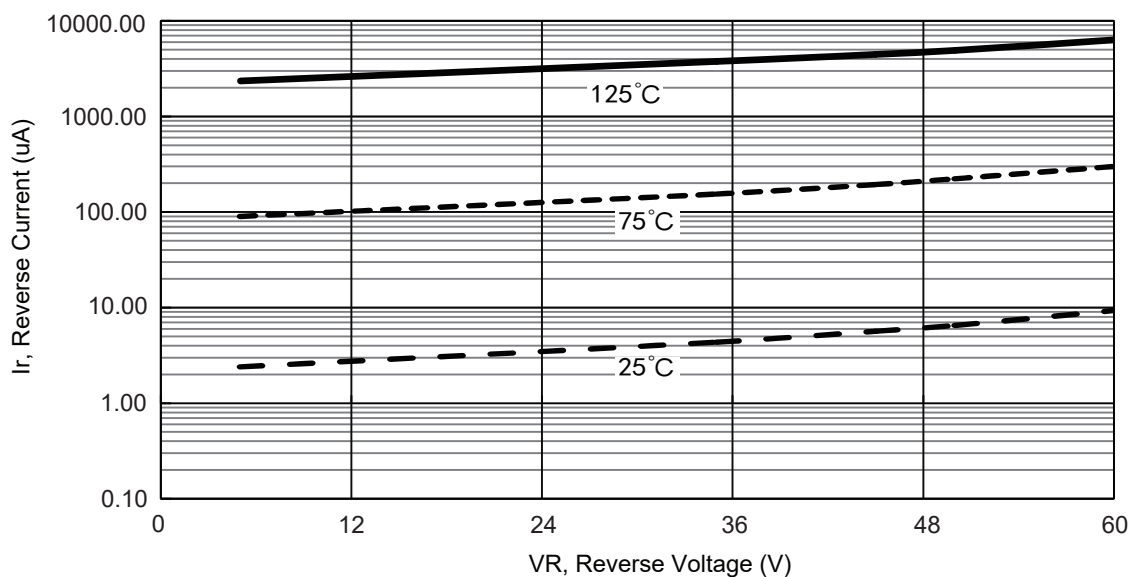
Typical Performance Characteristics



Current derating curve, per element



The forward voltage and forward current curve



The reverse leak current and the reverse voltage (single-device) curve

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