

15A SCHOTTKY BARRIER RECTIFIER

General Description

MBRD1545CTLV 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

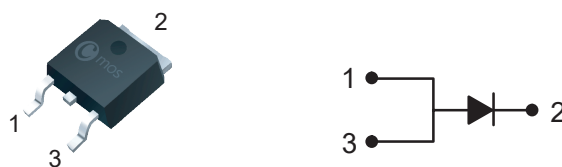
Product Summary

V_{RRM}	V_F	$I_{F(AV)}$
45V	0.55V	15A

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



TO-252-2L
(MBRD1545CTLV)

Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V_{RRM}	Peak Repetitive Reverse Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated VR-20KHz Square Wave) - 50% duty cycle	15	A
I_{FSM}	Forward Peak Surge Current(Rated Load 8.3ms Half Mssine Wave-According to JEDEC Method)	150	A
T_J	Operating Junction Temperature	150	°C
T_{STG}	Storage Temperature	-40 to 150	°C

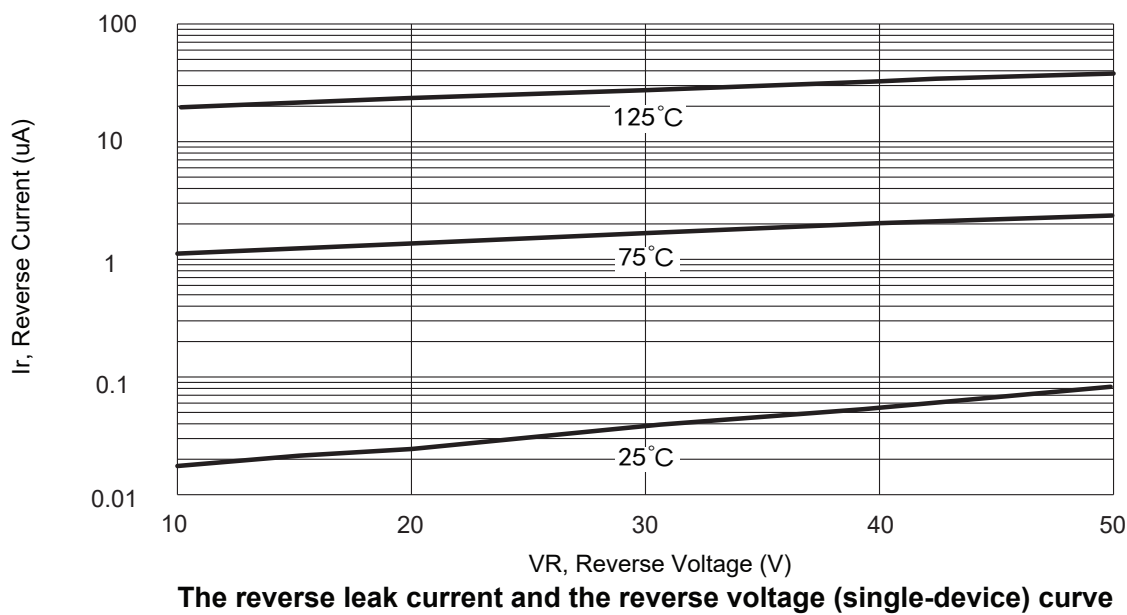
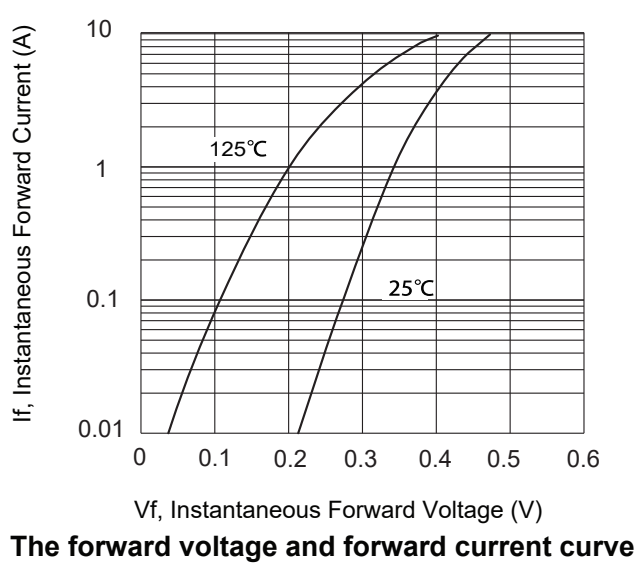
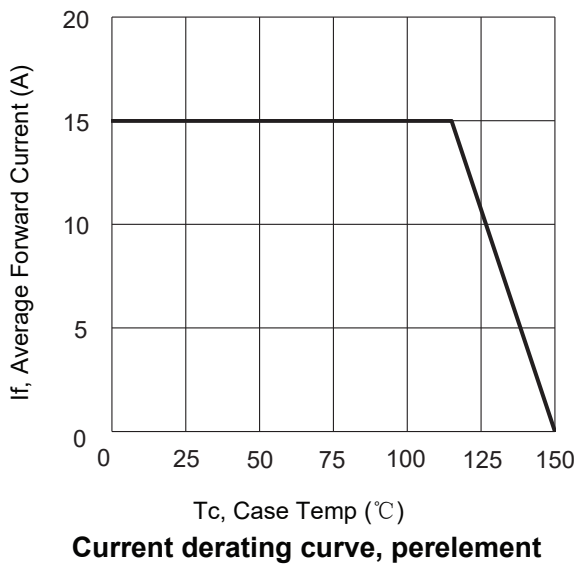
Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case(Per Leg)	2.2	---	°C/W

Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_F	Forward Voltage Drop per diode	$I_F=15A$, $T_J=25^{\circ}C$	---	0.48	0.55	V
I_R	Reverse Leakage Current per diode	$V_R=45V$, $T_J=25^{\circ}C$	---	---	0.15	mA
		$V_R=45V$, $T_J=100^{\circ}C$	---	---	20	mA

Typical Performance Characteristics



This product has been designed and qualified for the consumer market.
Cmos assumes no liability for customers' product design or applications.
Cmos reserves the right to improve product design, functions and reliability without notice.