

### **Dual common cathode Schottky Barrier Diode**

### MBRF20U80CTA

Low Forward Voltage/Low Reverse Current

#### **FEATURES**

- Average Output Rectified Current : I\_=20A
- RepetitivePeak Reverse Voltage : V<sub>RRM</sub>=80V
- Low Forward Voltage
- Low Reverse Current

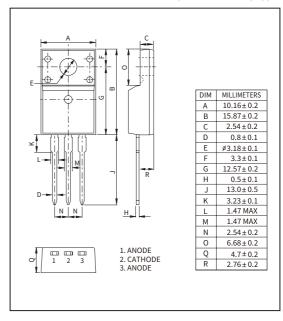
#### **APPLICATIONS**

- Switch mode power supplies
- Output rectification
- General Purpose
- · Free-Wheeling
- Power Inverter

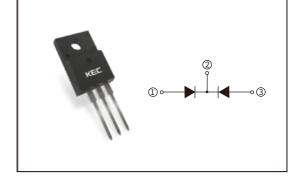
#### ORDERING INFORMATION

PART NUMBER	QTY (PER TUBE)	QTY (PER CARTON BOX)		
MBRF20U80CTA	50 pcs	6,000 pcs		

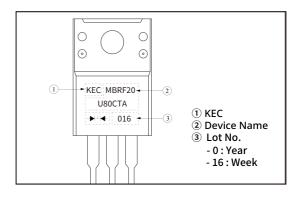
#### PACKAGE DIMENSION(TO-220IS(1))



#### PIN CONFIGURATION



#### **MARKING CODE**

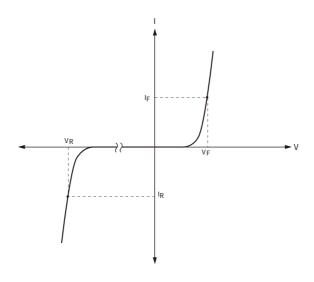


### MAXIMUM RATING (T<sub>J</sub>=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive peak reverse voltage	$V_{RRM}$	80	V
Average Output Rectified Current(Tc=110℃)(Note)	I <sub>O</sub>	20	А
Surge Non-repetitive Forward Current Sine Halfwave(60Hz)	I <sub>FSM</sub>	150	А
Junction Temperature	TJ	-40~150	င
Storage Temperature Range	$T_{stg}$	-50~150	င

<sup>\*</sup>Note: average forward current of centertap full wave connection

#### **DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL**



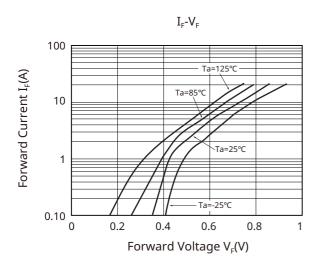
### ELECTRICAL CHARACTERISTICS ( $T_a$ =25°C,unless otherwise specified)

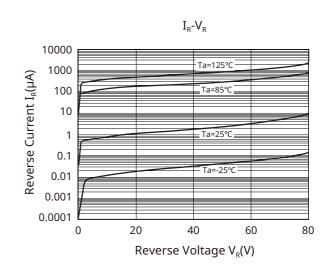
CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V <sub>FM</sub>	I <sub>FM</sub> =10A	T <sub>j</sub> =25°C	-	0.70	0.80	V
			T <sub>j</sub> =125°C	-	0.65	0.72	
Repetitive Peak Reverse Current	loou	I <sub>RRM</sub> =Rated	T <sub>j</sub> =25°C	-	-	0.6	mA
	IRRM - Nateu	T <sub>j</sub> =125°C	-	-	100	IIIA	
Junction Capacitance	CJ	V <sub>R</sub> =1V, f=1MHz		-	550	ı	pF

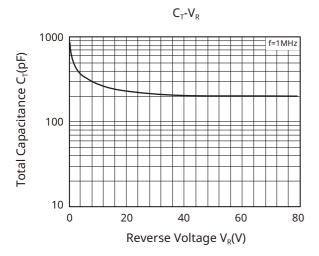
#### THERMAL CHARACTERISTICS

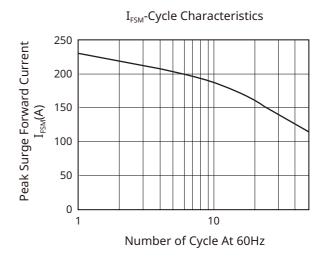
CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	Per diode	-	-	4.0	°C/W
mermat Resistance			Total Device	-	-	3.6	

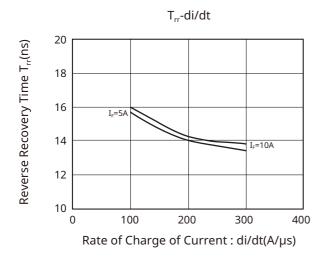
## PRODUCT DATASHEET Schottky Barrier Type Diode - MBRF20U80CTA

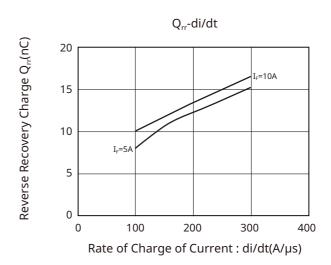




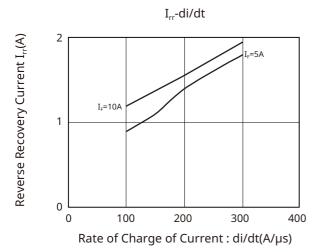








# PRODUCT DATASHEET Schottky Barrier Type Diode - MBRF20U80CTA



#### PRECAUTION ON USING KEC PRODUCTS

- 1. The products described in this data are intended to be used in general-purpose electronic equipment. (Office equipment, telecommunication equipment, measuring equipment, home appliances)
- 2. When you intend to use these products with equipment or device which require an extremely high of reliability and special applications (such as automobile, air travel aerospace, transportation equipment, life support, system and safety devices) in which special quality and reliability and the failure or malfunction of products may directly jeopardize or harm the human body or damage to property and any application other than the standard application intended, please be sure to consult with our sales representative in advance.
- 3. On designing your application, please use product within the ranges guaranteed by KEC for maximum rating, operating supply voltage range, heat radiation characteristics and other characteristics. User shall be responsible for failure or damage when used beyond the guaranteed ranges.
- 4. The technical information described in this data is limited to showing representative characteristics and applied circuit examples of the products and it does not constitute the warranting of industrial property, the granting of relative rights, or the granting of any license.
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