

## **Product profile**

Dual Common-Cathode Ultra Low VF Schottky Rectifier

## **General description**

Rectifiers 30 Amp 150V

#### **Features**

- · Guard ring for overvoltage protection
- Lower power losses, high efficiency
- · Low forward voltage drop
- · Low leakage current
- High forward surge capability
- High frequency operation
- Solder Dip 260 °C, 40 s
- Component in accordance to ROHS 2002/95/EC

and WEEE 2002/96/EC

## **Typical applications**

For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, dc-to-dc converters or polarity protection application.







## **Mechanical data**

Case: ITO-220AB

Molding compound meets UL 94 V-0 flammability rating Terminals: Matte tin plated leads, solderable per meets

**JESD 201** 

Polarity: As marked Weight: 2.3 grams

Mounting Torque: 10 in-lbs maximum

Maximum Ratings (Tc=25°C unless otherwise noted)							
Parameter	Symbol	TMBRF30150CT	Unit				
Maximum repetitive peak reverse voltage	VRRM	150	V				
RMS Voltage (Max.)	VRMS	105	V				
Working peak reverse voltage	VRWM	150	V				
Maximum average forward rectified current Total D	Device IF(AV)	30	А				
Peak forward surge current							
8.3ms single half sine-wave superim	posed IFSM	250	Α				
on rated load (JEDEC Mo	ethod)						
Operating junction temperature range	TJ	-55 to +150	°C				
Storage temperature range	TSTG	-55 to +150	°C				

THERMAL CHARACTERISTICS					
Parameter	Symbol	Value	Unit		
Typical thermal resistance	RθJC	4	°C/W		

Notes: (1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

Publication Order Number: TMBRF30150CT



## Electrical characteristics (Tc=25°C unless otherwise noted)

OFF CHARACTERISTICS

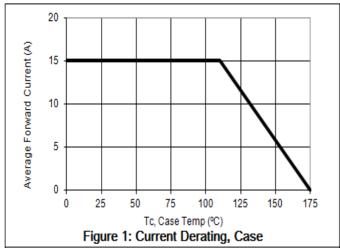
Parameter	Symbol	Value	Unit	
		Typical	Max	
Instantaneous forward voltage				
at IF=3A, Tj=25°C		0.64		
at IF=15A, Tj=25°C	VF	0.82	0.92	V
at IF=3A, Tj=125°C		0.52		
at IF=15A, Tj=125°C		0.68	0.74	
Maximum reverse current Tj=25°C	ID	100		u'A
at working peak reverse voltage Tj=125°C	- IR	10		m'A
Junction Capacitance @ DC 4V	CJ	250		pF

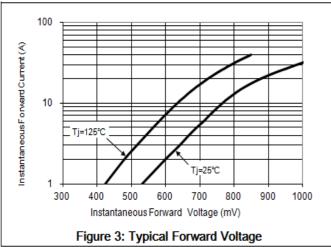
## **DEVICE MARK**

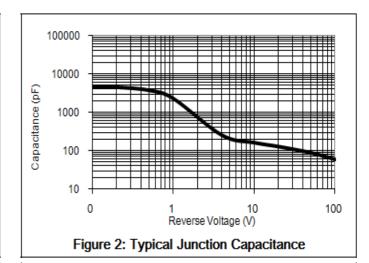
TMBRF30150CT

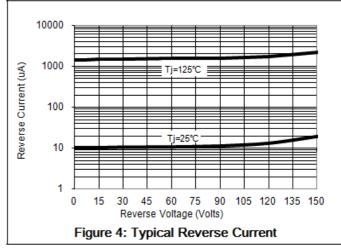


## ■ Characteristic Curves











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