

# 15A SHOTTKY BARRIER DIODE

## 15SB04M

15SB04M is a shottky barrier diode of which forward average current is 15A.

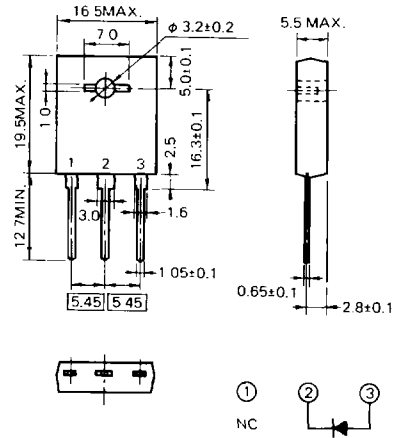
**FEATURES**

- Low forward voltage drop.
- Very fast recovery time.
- Easy installation.

**APPLICATIONS**

- Switching Regulators
- DC-DC Convertors

**OUTLINE DRAWING (Unit: mm)**



**MAXIMUM RATINGS**

ITEMS	SYMBOLS	15SB04M	UNITS	NOTES
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V	
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	48	V	
Forward Current	$I_F(AV)$	15 ( $T_c=95.5^\circ\text{C}$ , Square wave Duty=50%)	A	
Surge Forward Current	$I_{FSM}$	250	A	
Junction Temperature	$T_j$	-40 ~ 125	$^\circ\text{C}$	
Storage Temperature	$T_{stg}$	-40 ~ 125	$^\circ\text{C}$	

**ELECTRICAL CHARACTERISTICS ( $T_j=25^\circ\text{C}$ )**

ITEMS	SYMBOLS	CONDITIONS	MAX.	UNITS	NOTES
Repetitive Peak Reverse Current	$I_{RRM}$	$T_j=125^\circ\text{C}$ $V_{RM}=V_{RRM}$	50	mA	
Forward Voltage	$V_{FM}$	$I_{FM}=12\text{A}$	0.6	V	
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	2.5	$^\circ\text{C/W}$	
Reverse Recovery Time	$t_{rr}$	$I_{FM}=5\text{A}$	50	nS	Typ.

Fig. 1  $v_F$ - $i_F$  Characteristics

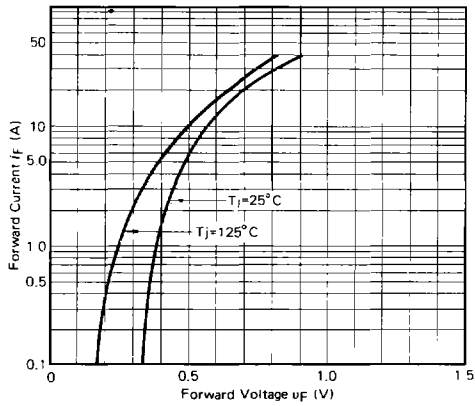


Fig. 2  $P_{F(AV)}$ - $I_{F(AV)}$  Characteristics

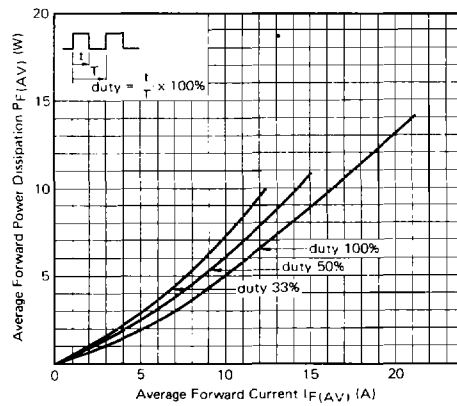


Fig. 3  $I_{F(AV)}$ - $T_C$  Ratings

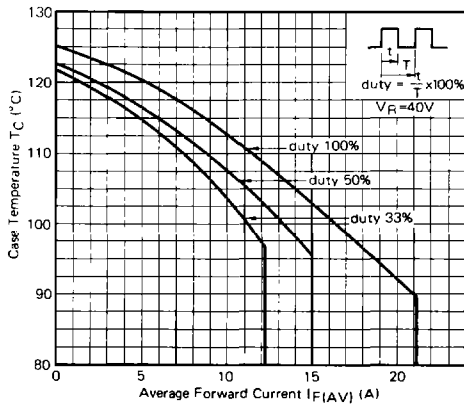


Fig. 4  $I_{F(AV)}$ - $T_a$  Ratings

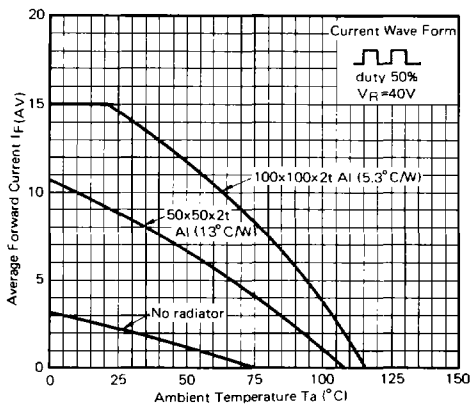


Fig. 5 Transient Thermal Impedance

