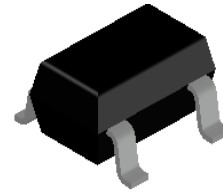


Infinitesimal surface mount bridge rectifier

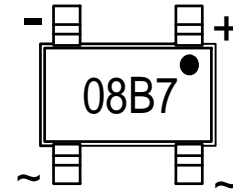
Features

- Low profile space
- Ideal for printed circuit board
- Low reverse leakage
- Applied in power supply equipment
- High ring wave immunity capability
- High temperature soldering guaranteed: 260° C/10 seconds
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC



RoHS
COMPLIANT

IBS



Marking

Mechanical Data

- Case: IBS
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: Solder plated, solderable per MIL-STD-750 Method 2026
- Polarity: Mark a dot at the positive position.
The other end on the same side is negative. AC pole is on the other side
- Mounting Position: Any

Major Ratings and Characteristics

$I_{F(AV)}$	0.8A
V_{RRM}	400V to 1000V
I_{FSM}	25A
V_F	0.9V
$T_{Jmax.}$	125°C

Maximum Ratings & Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	VMB4S	VMB6S	VMB8S	VMB10S	Units
Marking	-	08B4	08B5	08B6	08B7	-
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	400	600	800	1000	V
Average forward rectified current	$I_{F(AV)}$	0.8				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	25				A
Rating for fusing ($t < 8.3$ ms)	I^2t	2.6				A ² S
Thermal resistance from junction to ambient	$R_{\theta JA}^{(1)}$	180				°C/W
Thermal resistance from junction to lead	$R_{\theta JL}$	35				°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +125				°C

Note 1: On 1.6mm thick glass epoxy P.C.B.(1OZ) mounted on 0.05 x 0.05" (1.3 x 1.3 mm) solder pads.



Electrical characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test conditions	Symbol	Min.	Typ.	Max.	Units
Junction temperature	$I_F=0.15\text{A}, V_{\text{RMS}}=220\text{V}, T_A=25^\circ\text{C}$ and conduction angle= 80°	T_J	-	-	85	$^\circ\text{C}$
Instantaneous forward voltage	$I_F=0.8\text{A}^{(2)}$	V_F	-	0.9	1.0	V
Reverse current	$V_R=V_{\text{DC}}$	I_R	-	-	5.0	μA
			-	-	100	

Note 2: Pulse test:300 μs pulse width,1% duty cycle.

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Foward Current Derating Curve

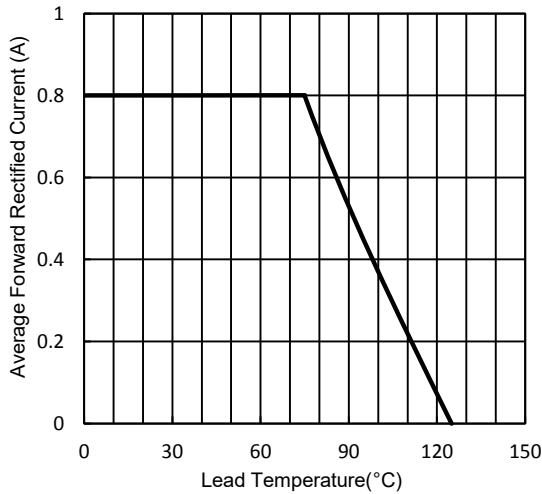


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Curve

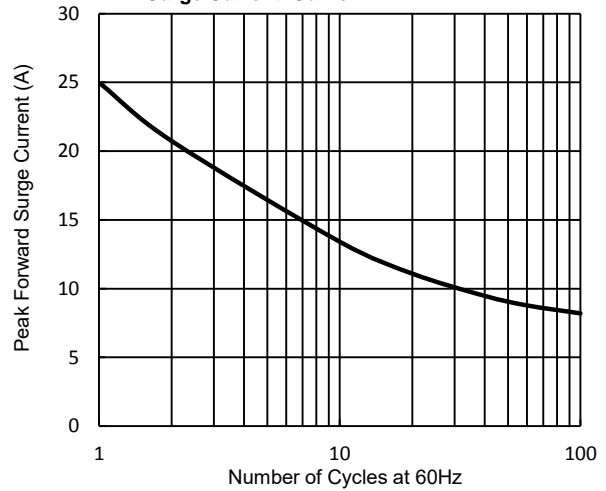


Fig.3 Typical Forward Voltage Characteristics

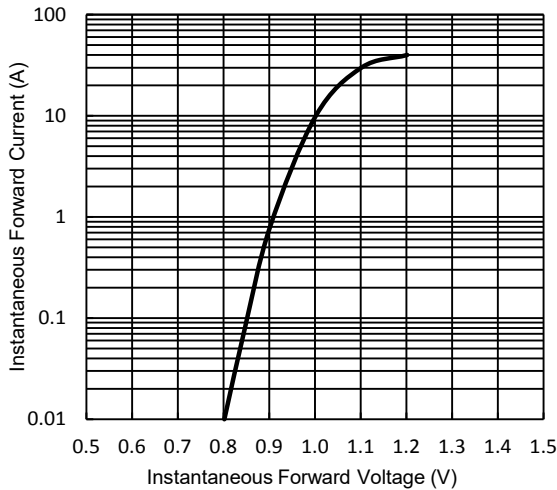


Fig.4 Typical Reverse Characteristics

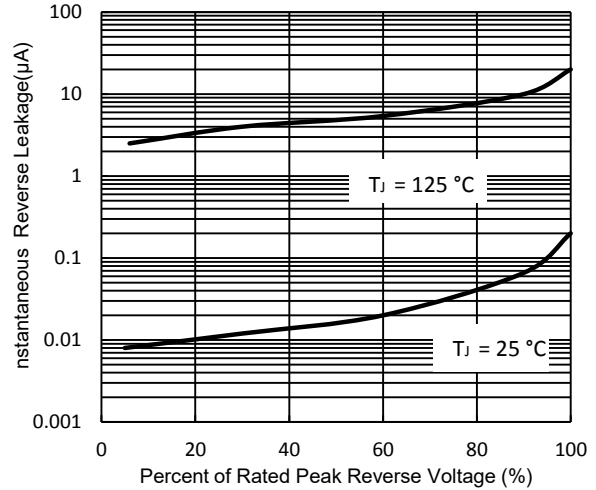
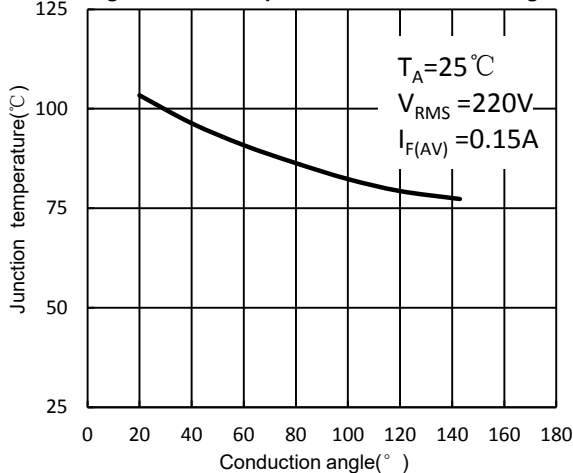


Fig.5 Junction temperature vs. conduction angle





Package Outline

IBS

