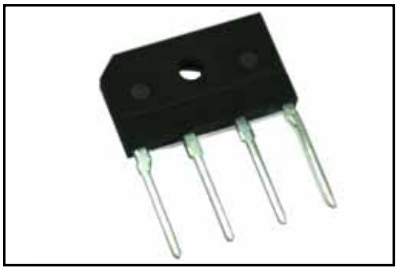
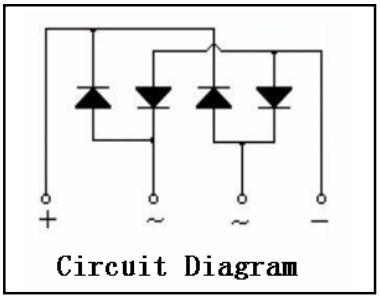
Bridge rectifiers

D3SB10 Thru D3SB100
RBV402S Thru RBV407S





Circuit Diagram

Feature

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component index,file number E231047
- Single-in-line package
- High current capality with small package
- Superior thermal conductivity
- High temperature soldering guaranted: 260℃/10 seconds
- High I_{FSM}
- We declare that the material of product compliance with RoHS reqirements.

Product Characteristic

Parameter Symbol	Symbol	D3SB10 RBV402S	D3SB20 RBV403S	D3SB40 RBV404S	D3SB60 RBV405S	D3SB80 RBV406S	D3SB100 RBV407S	Unit
Maximum repetitive voltage	V_{RM}	100	200	400	600	800	1000	V
Maximum DC reverse current TA=25℃ at rated DC blocking voltage TA=125℃	I_R	10						μA
		500						
Average rectified forward current Tc=100℃ 60Hz Sine wave Resistance load T_A=25℃	Io	4 (1)						A
		1.8 (2)						
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120						A
Dielectric strength terminals to case， AC 1 minute Current 1mA	Vdia	2.5						KV
Max instantaneous forward voltage at 2.0A	V_F	1.1						V
Operating junction temperature	T_J	150						℃
Maximum thermal resistance per leg on P.C.B. without heat-sink	$R_{\theta JA}$	26 (2)						℃/W
on Al plate heat-sink	$R_{\theta JC}$	4.2 (1)						
Storage temperature	Tstg	-40~150						℃

Notes： (1)Unit case mounted on Al plate heat-sink
(2) Unites mounted on P.C.B. without heat-sink
(3)Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw{heat-sink size:6.5*4.0*0.3cm)

Characteristic Curves

Fig. 1 Derating Curve

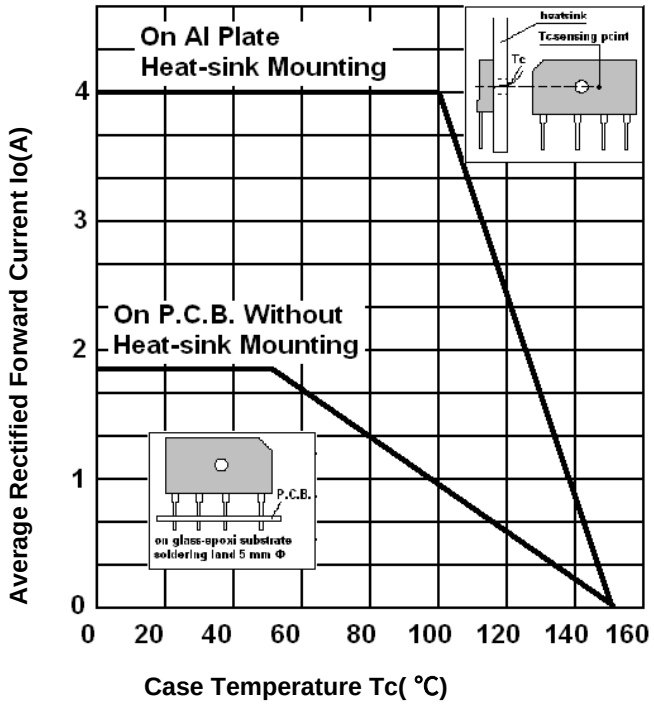


Fig.2 Typical Reverse Characteristics

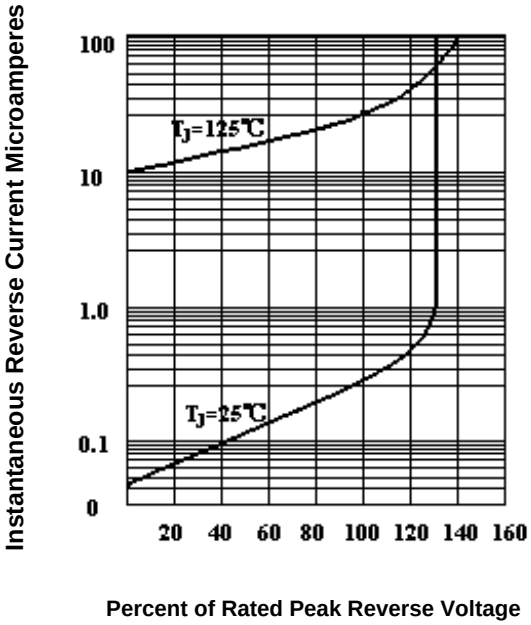


Fig.3 Peak Surge Forward capability

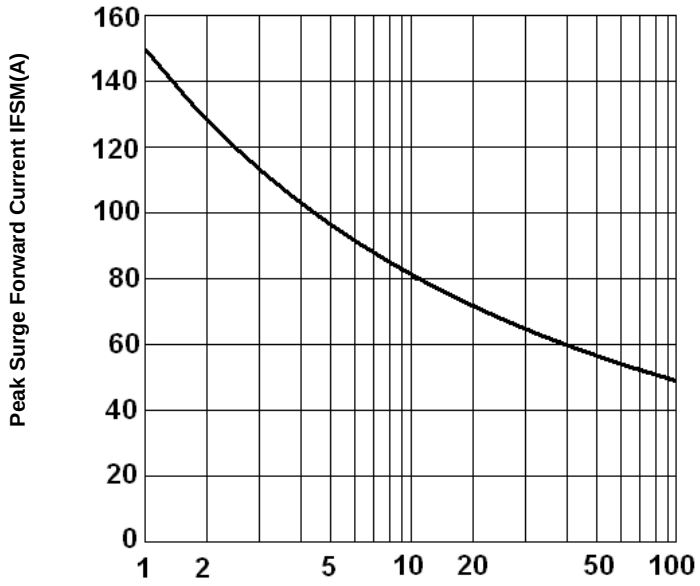
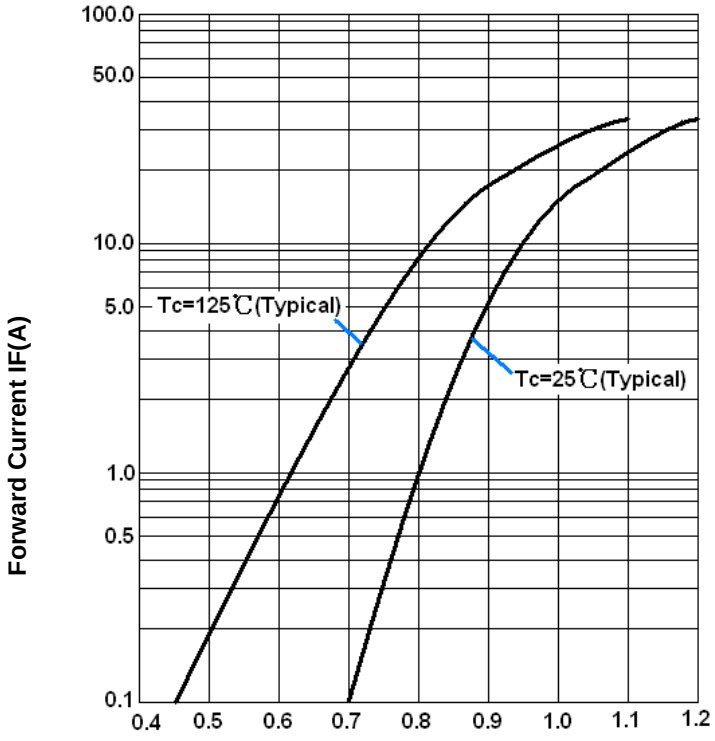
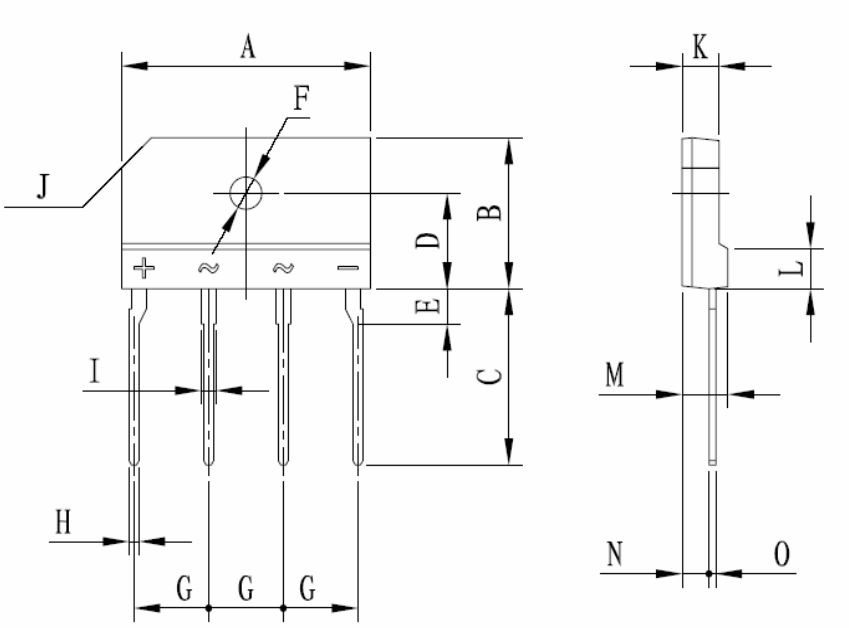


Fig.4 Forward Voltage



SHAPE AND DIMENSIONS



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.972	0.996	24.70	25.30
B	0.579	0.602	14.70	15.30
C	0.669	0.709	17.00	18.00
D	0.366	0.382	9.30	9.70
E	0.118	0.157	3.00	4.00
F	0.122	0.134	3.10	3.40
G	0.287	0.303	7.30	7.70
H	0.04	0.04	0.90	1.10
I	0.051	0.067	1.30	1.70
J	0.118*45°		3*45°	
K	0.138	0.154	3.50	3.90
L	0.18		4.50	
M	0.173	0.189	4.40	4.80
N	0.098	0.114	2.50	2.90
O	0.020	0.035	0.50	0.90

NOTES: 1. DIMENSIONING AND TOLERANCING PER ANSIY14.5M, 1982.
2. CONTROLLING DIMENSION: mm.