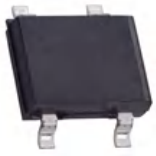
DESCRIPTION and APPLICATIONS

Suitable for AC to DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

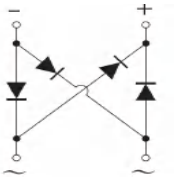
VOLTAGE RANGE
50 to 1000 Volts
CURRENT
3.0 Ampere

FEATURES

* Ideal for printed circuit board
* Reliable low cost construction utilizing molded plastic technique
* High surge current capability

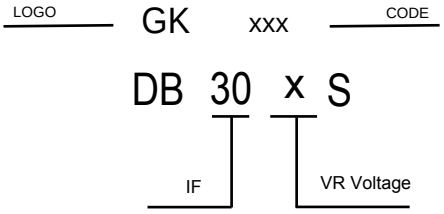


Top View



Internal Schematic





MECHANICAL DATA

* Polarity: Symbol molded on body
* Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	DB301S	DB302S	DB303S	DB304S	DB305S	DB306S	DB307S	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80							A
I^2t Rating for Fusing (1ms < t < 8.3ms)	26.6							A^2S
Maximum Forward Voltage Drop per Bridge Element at 3.0A.	1.1							V
Maximum DC Reverse Current Ta=25℃	5							μA
at Rated DC Blocking Voltage Ta=125℃	500							μA
Operating Temperature Range, T_J	-65 — +150							℃
Storage Temperature Range, T_{STG}	-65 — +150							℃

RATING AND CHARACTERISTIC CURVES

Fig. 1 Output Current Derating Curve

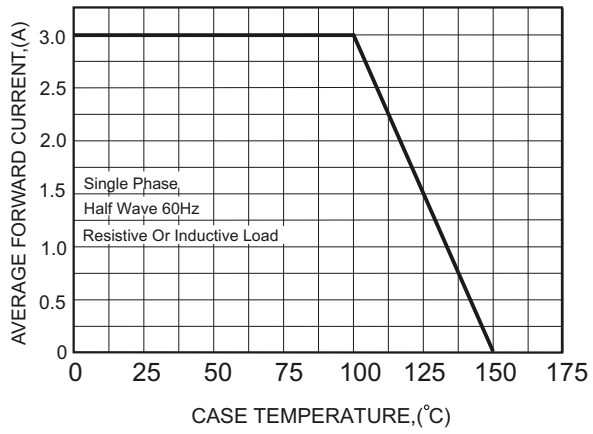


FIG.2-TYPICAL FORWARD CHARACTERISTICS

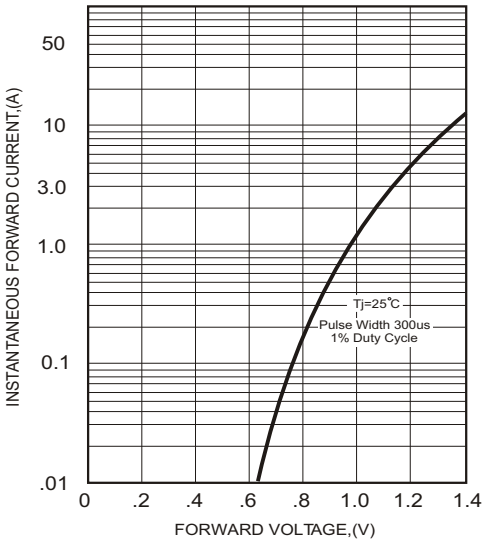


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

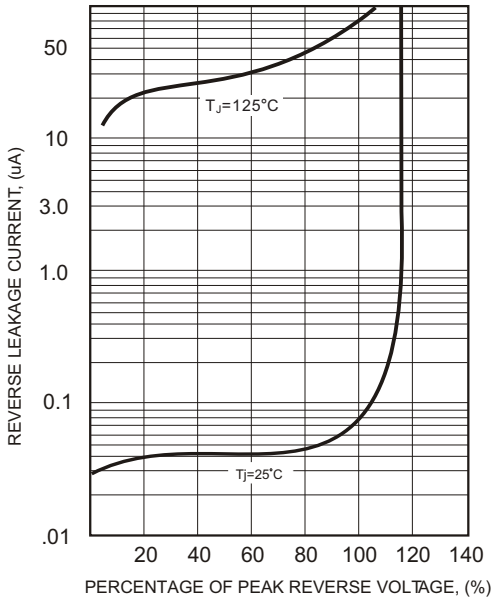
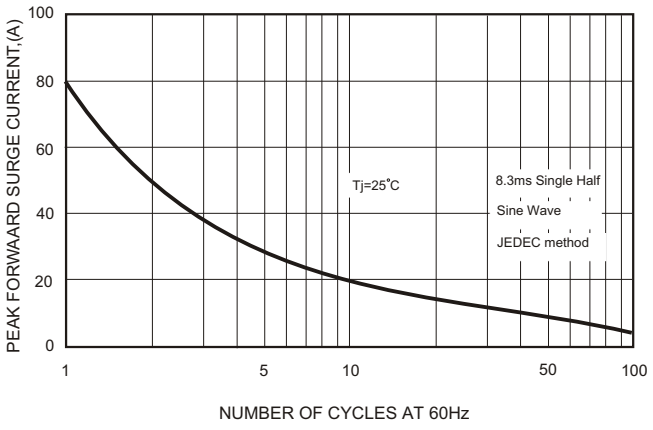


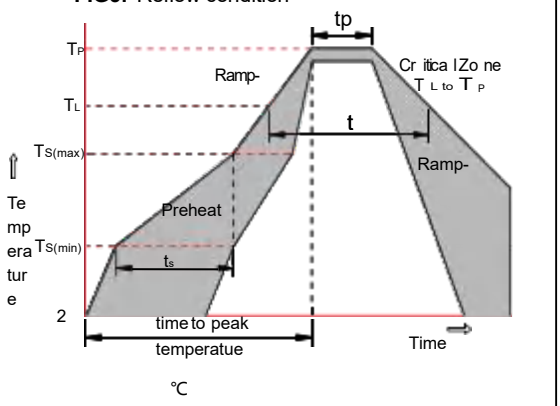
FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



Soldering parameters

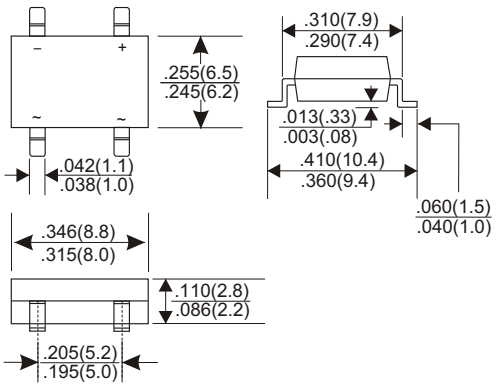
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217℃
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)℃
Time within 5℃ of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6℃/sec. Max
Time 25℃ to Peak Temp (T_P)		8 min. Max
Do not exceed		+260℃

FIG5: Reflow condition

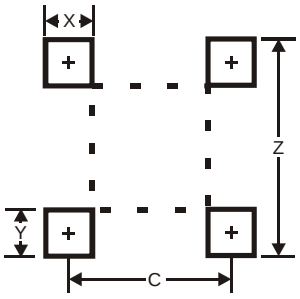


Package Dimensions & Suggested Pad Layout

DBS



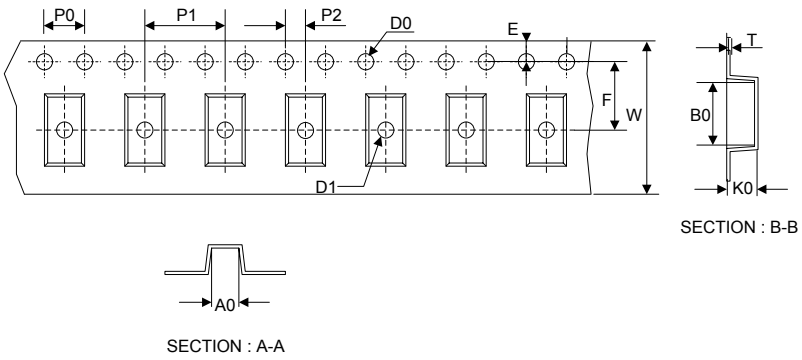
Dimensions in inches and (millimeters)



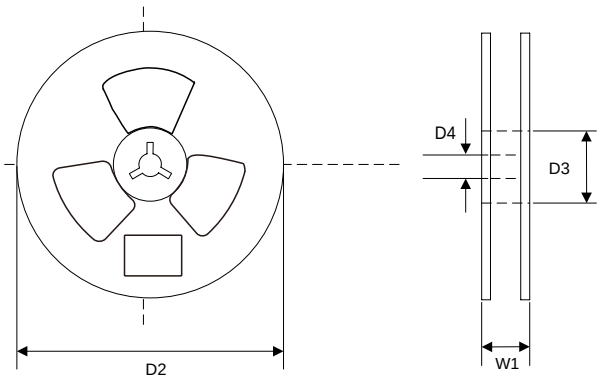
Dimensions	Value (in mm)
C	5.08
X	1.40
Z	10.80
Y	2.30

Tape & rell specification

Tape



13” Reel



Symbol	Dimension (mm)
P0	4.00±0.20
P1	12.00±0.20
P2	2.00±0.20
D0	1.55±0.25
D1	1.60±0.20
E	1.75±0.20
F	7.50±0.20
W	16.00±0.20
A0	9.40±0.25
B0	11.00±0.25
K0	3.35±0.25
T	0.25±0.10
D2	330.0±5.0
D3	73Min.
D4	16.0±2.5
W1	18.0±3.0
Quantity: 1500PCS	