

DB-1		
Dim	Min	Max
A	8.20	8.60
B	6.10	6.50
C	2.35	2.65
E	0.15	0.35
F	5.40	6.00
I	0.35	0.65
J	8.40	9.00
K	4.80	5.20
L	7.65	8.15
All Dimensions in mm		

FEATURES

- Rating to 1000V PRVP
- Surge overload rating to 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Glass passivated chip junctions
- Plastic material has UL flammability classification 94V-O

Maximum Ratings (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	35	75	140	280	420	560	700	V
DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T _A =40°C	I _{F(AV)}	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	30							A
I ² t Rating for fusing @T _j =25°C	I ² t	3.7							A ² S

Thermal Characteristics

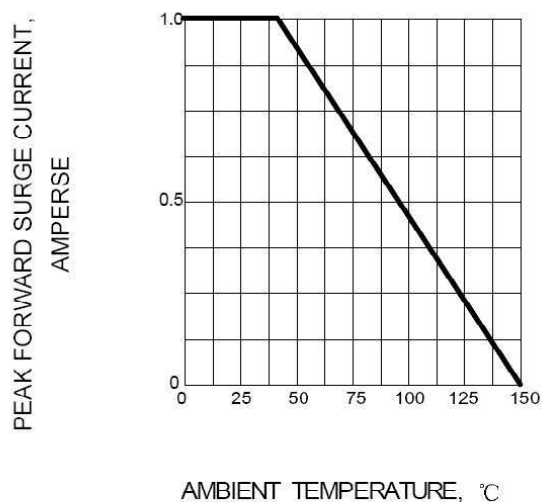
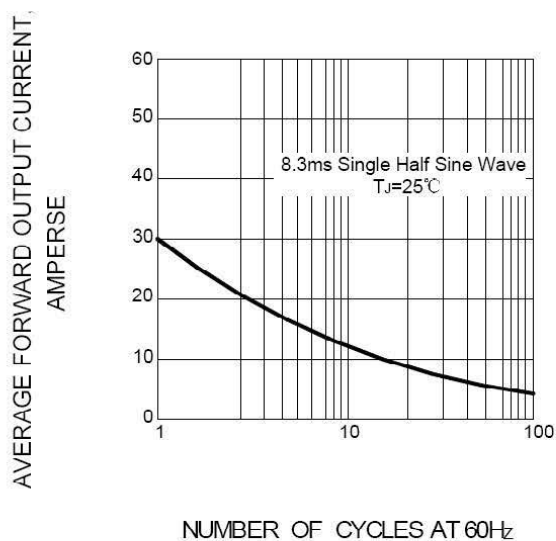
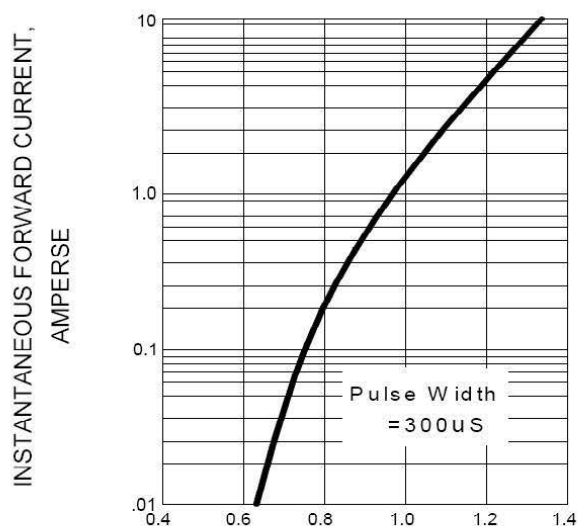
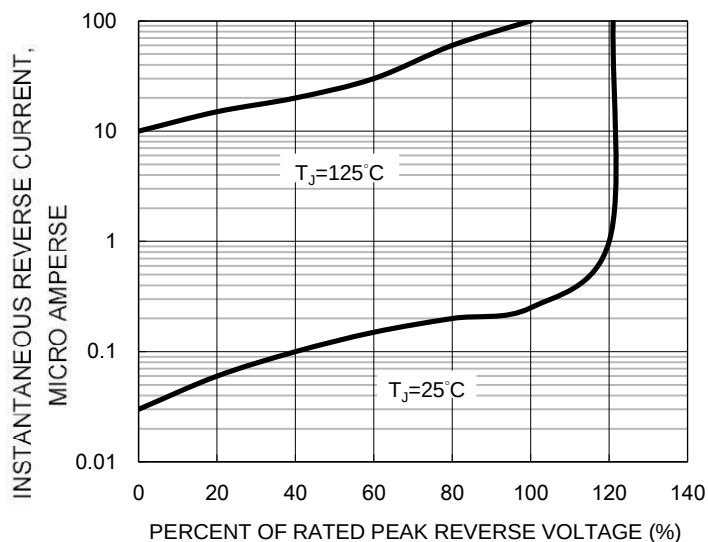
Characteristic	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Typical thermal resistance per leg (Note1)	R Θ JA	66							°C/W
	R Θ JC	28							
	R Θ JL	27							
Operating junction temperature range	T _J	- 55 ---- + 150							°C
Storage temperature range	T _{STG}	- 55 ---- + 150							°C

Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Maximum instantaneous forward voltage at 1.0 A	V _F	1.1							V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	5 0.5							μ A mA

Note:

1. Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

FIG.2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

FIG.3 – TYPICAL FORWARD CHARACTERISTIC

FIG.4 – TYPICAL REVERSE CHARACTERISTIC


INSTANTANEOUS FORWARD VOLTAGE, VOLTS

PERCENT OF RATED PEAK REVERSE VOLTAGE,%

Device	Package	Shipping
DB101-DB107	DB-1	50unit/pipe