DBF610

6.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS

FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 6.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: DBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.234g / 0.00825oz

Marking

Marking code
DBF610

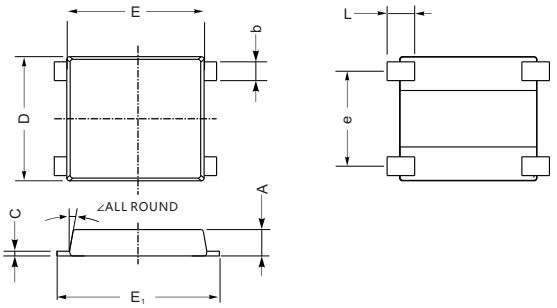
VOLTAGE RANGE

1000 Volts

CURRENT

6.0 Ampere

DBF



UNIT		A	C	D	E	E_1	L	e	b	∠
mm	max	1.5	0.29	7.0	7.6	8.9	1.6	5.3	1.15	10°
	min	1.3	0.17	6.2	7.1	8.4	1.0	4.9	0.95	
mil	max	59	12	276	299	350	55	209	45	
	min	51	7	244	280	331	31.5	193	37	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	DBF610	UNIT
Maximum Recurrent Peak Reverse Voltage	1000	
Maximum RMS Voltage	700	V
Maximum DC Blocking Voltage	1000	
Maximum Average Forward Rectified Current at Ta=40°C(Note 1)	6.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120	A
I^2t Rating for Fusing (1ms < t < 8.3ms)	60	A^2S
Maximum Forward Voltage Drop per Bridge Element at 6.0A	1.1	V
Maximum DC Reverse Current Ta=25°C	5.0	μA
at Rated DC Blocking Voltage Ta=125°C	200	μA
Typical Thermal Resistance R_{JA} (Note 2)	50	°C/W
Operating Temperature Range, T_J	-55 — +150	°C
Storage Temperature Range, T_{STG}	-55 — +150	°C

NOTES: 1. Mounted on P.C. Board.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (DBF610)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

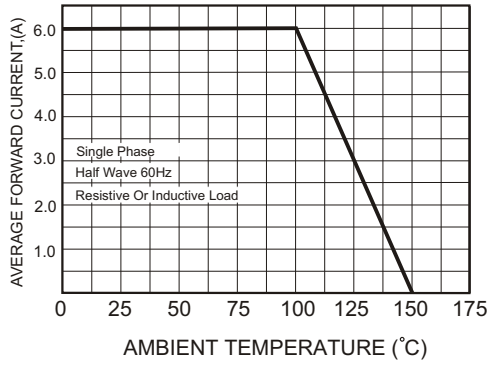


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

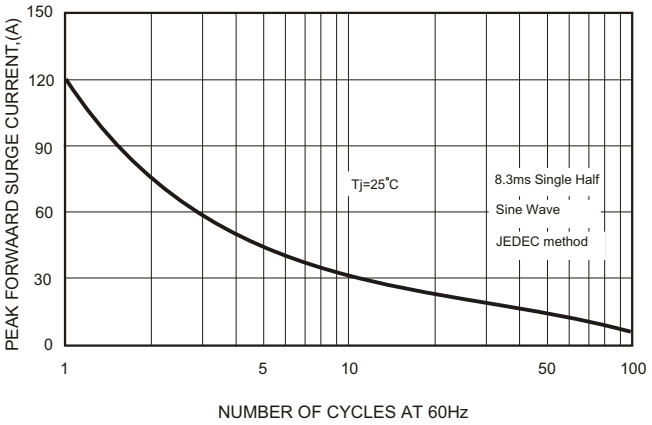


FIG.3-TYPICAL FORWARD CHARACTERISTICS

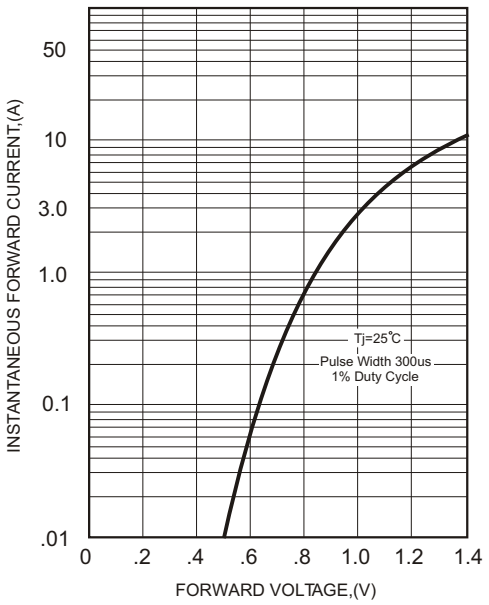


FIG.4-TYPICAL REVERSE CHARACTERISTICS