Elektronische Bauelemente

DB151~DB157

50V~1000 V, 1.5 A

Surface Mount Bridge Rectifiers

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

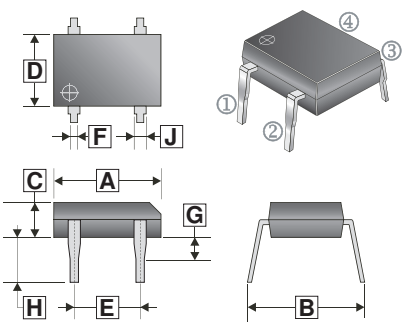
FEATURES

- Glass passivated chip
- High surge forward current capability

APPLICATIONS

- General purpose 1 phase Bridge rectifier applications

DB



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	8.13	8.51	F	0.46	0.58
B	7.6	8.9	G	1.27	2.03
C	2.8	3.3	H	3.81	4.69
D	6.2	6.5	J	0.89	1.14
E	5	5.2			

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, de-rate current by 20%.)

Parameters	Symbol	Part Number							Unit
		DB 151	DB 152	DB 153	DB 154	DB 155	DB 156	DB 157	
Peak Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current@ 60Hz sine wave, R-load, T_A=25℃	$I_{(AV)}$	1.5							A
Non-repetitive Surge Forward Current@ 60Hz sine wave, 1 cycle, T_J=25℃	I_{FSM}	30							A
Current Squared Time [1]	I^2t	3.7							A^2S
Peak Forward Voltage@ I_{FM}=1.5A, pulse measurement, rating of per diode	V_{FM}	1.1							V
Peak Reverse Current@ V_{RM}=V_{RRM}, pulse measurement, rating of per diode	I_{RRM}	10							μA
Thermal Resistance from Junction to Ambient@ on a glass-epoxy substrate	$R_{\theta JA}$	68							℃ / W
Thermal Resistance from Junction to Lead	$R_{\theta JL}$	15							℃ / W
Junction and Storage Temperature Range	T_J, T_{STG}	-55~150							℃

Notes：

1. 1ms≤t<8.3ms, T_J=25℃, rating of per diode.

RATINGS AND CHARACTERISTIC CURVES

FIG1:Io-Ta Curve

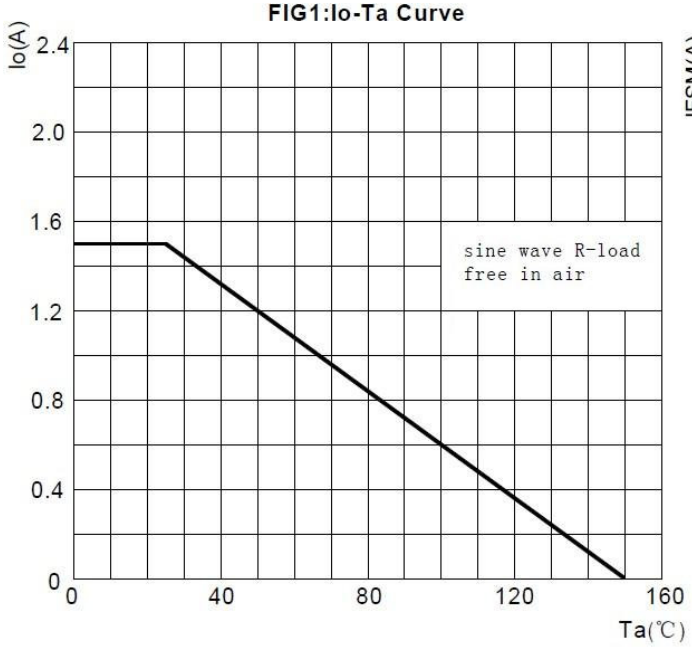


FIG2:Surge Forward Current Capadility

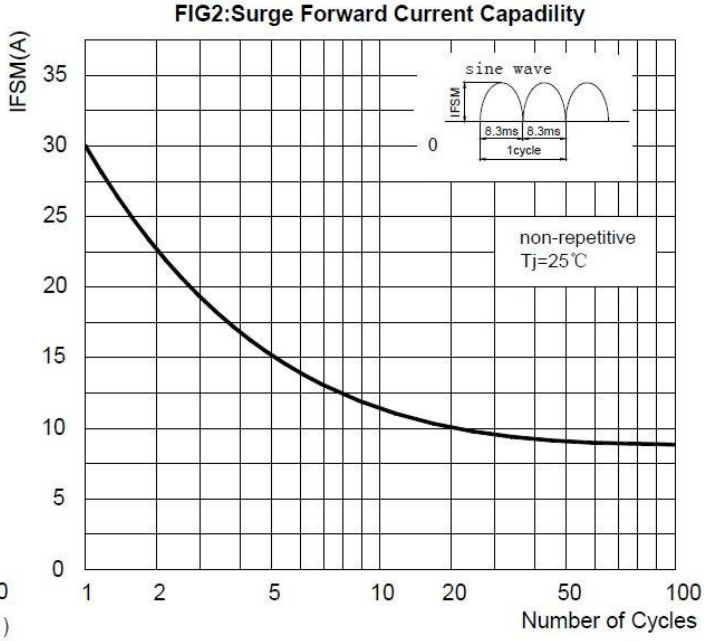


FIG3: Forward Voltage

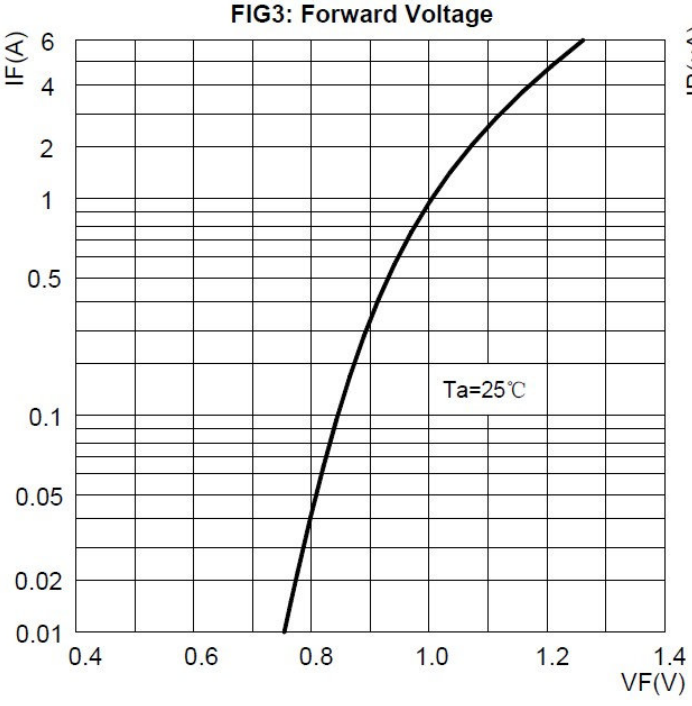


FIG4:Typical Reverse Characteristics