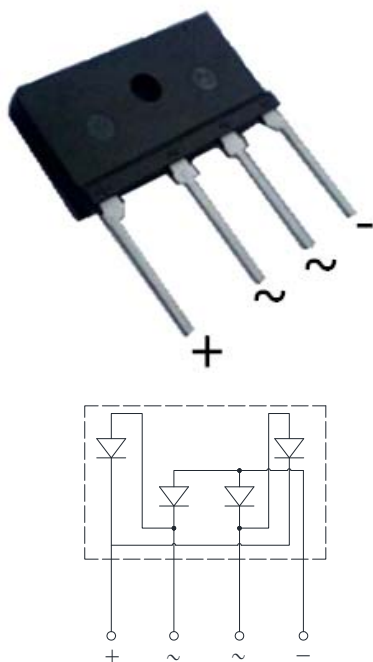


Low VF Bridge Rectifiers



Features

- UL recognition, file #E230084
- based on silicon planar process
- Low VF
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** JA
Molding compound meets UL 94 V-0 flammability rating, -compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D25JAU80
Device marking code				D25JAU80
Maximum Repetitive Peak Reverse Voltage		VRRM	V	800
Maximum RMS Voltage		VRMS	V	560
Maximum DC blocking Voltage		VDC	V	800
Average Rectified Output Current @60Hz sine wave, R-load	With heatsink T _C =105°C	I _O	A	25.0
	Without heatsink T _a =25°C			4.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, T _J =25°C		IFSM	A	360
Current squared time @1ms≤t≤8.3ms T _J =25°C, rating of per diode		I ² t	A ² S	538
Storage temperature		T _{stg}	°C	-55 ~ +150
Junction temperature		T _j	°C	-55 ~ +150
Dielectric strength @ Terminals to case, AC 1 minute		V _{dis}	KV	2
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8

D25JAU80

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V _F	V	IFM=12.5A	0.80	0.89	0.92
DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	-	0.005	5
			T _j =125°C	-	-	50
Junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	80	155	310

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D25JAU80
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	18.0
	Between junction and lead, With heatsink	R _{θJ-L}		2.5
	Between junction and case, With heatsink	R _{θJ-C}		1.0

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D25JAU80	B1	Approximate 4.3	15	750	1500	Tube

■ Characteristics(Typical)

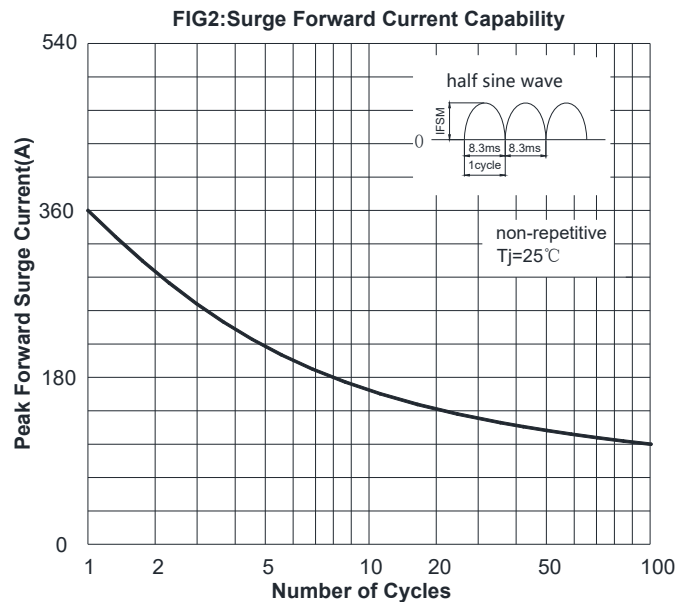
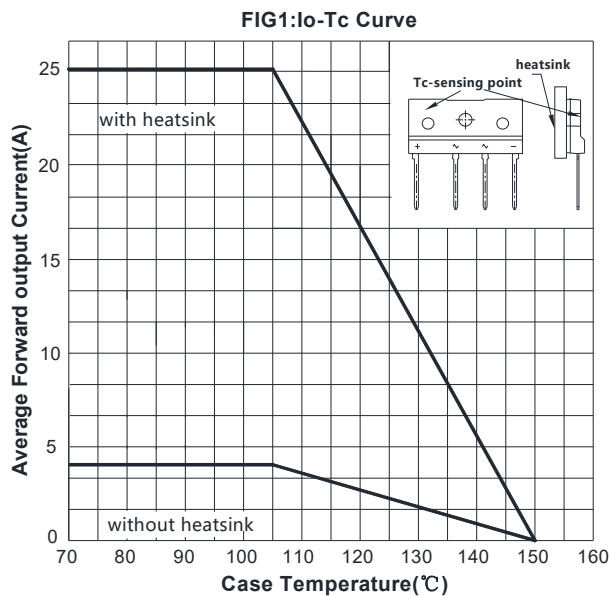


FIG3: Typical Forward Voltage

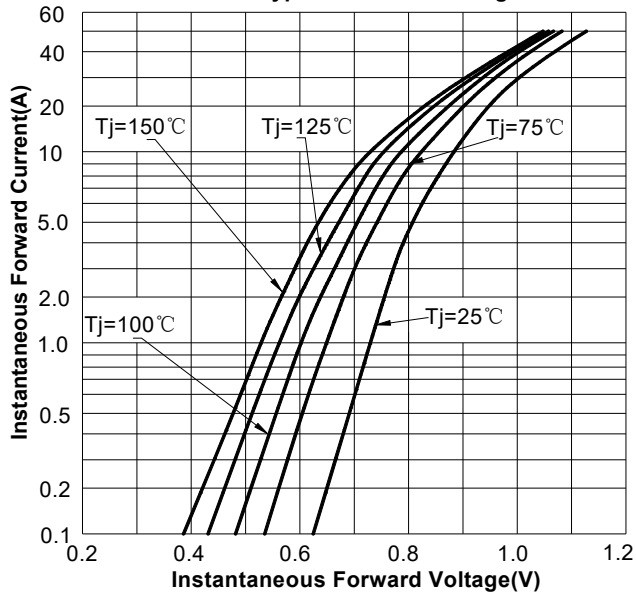
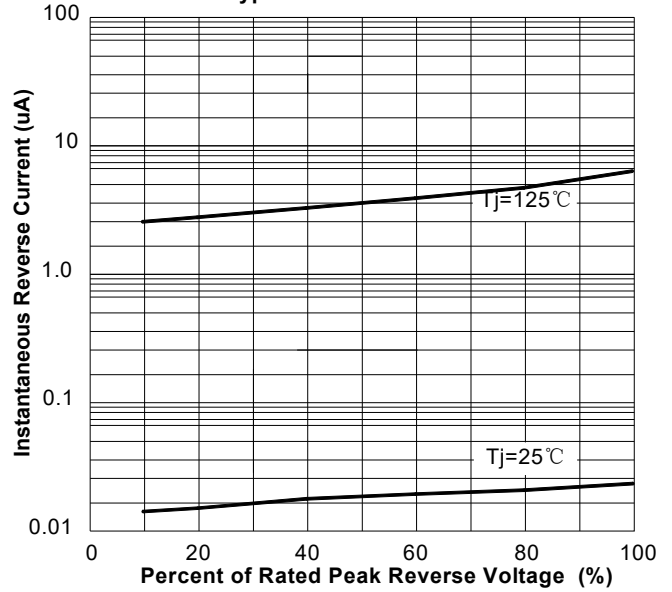
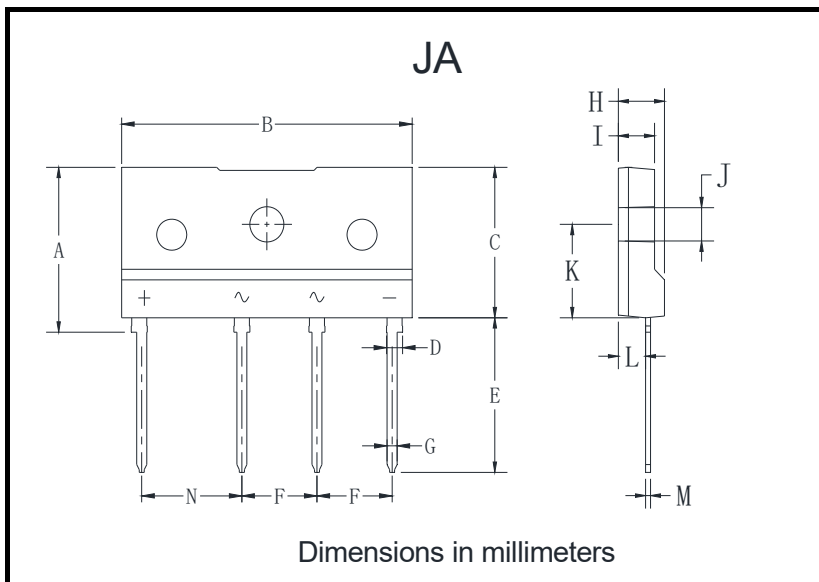


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



JA		
Dim	Min	Max
A	15.6	16.2
B	28.7	29.3
C	14.2	14.8
D	1.5	1.7
E	14.6	15.2
F	7.3	7.7
G	0.9	1.1
H	4.3	4.9
I	3.3	3.9
J	3.1	3.4
K	8.7	9.3
L	2.5	2.9
M	0.4	0.6
N	9.8	10.2

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