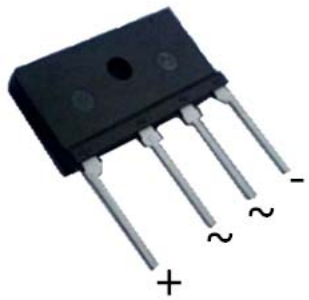
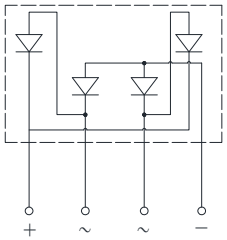
Low VF Bridge Rectifiers





Features

- UL recognition, file #E230084
- Glass passivated chip junction
- 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, RoHS-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℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D8JAL60
Device marking code				D8JAL60
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	600
Maximum RMS Voltage		V_{RMS}	V	420
Maximum DC blocking Voltage		V_{DC}	V	600
Average Rectified Output Current @60Hz sine wave, R-load,	With heatsink T_C =118℃	I_O	A	8.0
	Without heatsink T_a =25℃			3.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	175
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				350
Current squared time @1ms≤t≤8.3ms Tj=25℃,rating of per diode		I^2t	A^2S	127
Storage temperature		T_{stg}	℃	-55 ~ +150
Junction temperature		T_j	℃	-55 ~ +150
Dielectric strength @ Terminals to case, AC 1 minute		V_{dis}	KV	2
Mounting torque @Recommend torque：5kg·cm		Tor	kg·cm	8

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D8JAL60
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=4.0A	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25℃	5
			T_j=125℃	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	58

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	D8JAL60
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	22
	Between junction and case, With heatsink	$R_{\theta J-C}$		2

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

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D8JAL60	B1	Approximate 4.3	15	750	1500	Tube

■ Characteristics(Typical)

FIG1:Io-Tc Curve

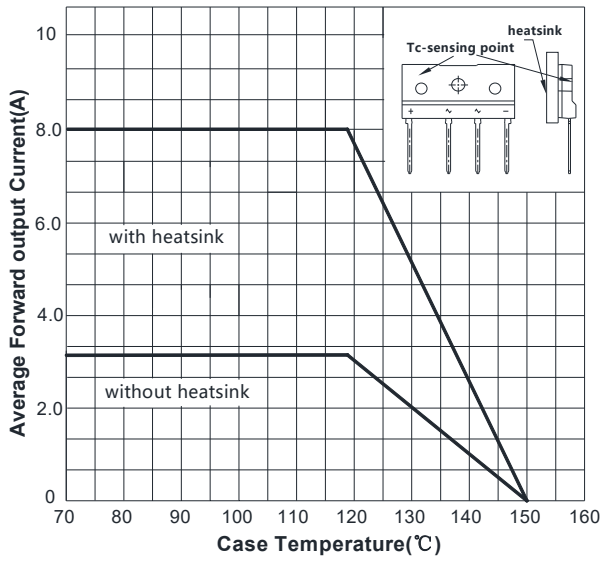


FIG2:Surge Forward Current Capability

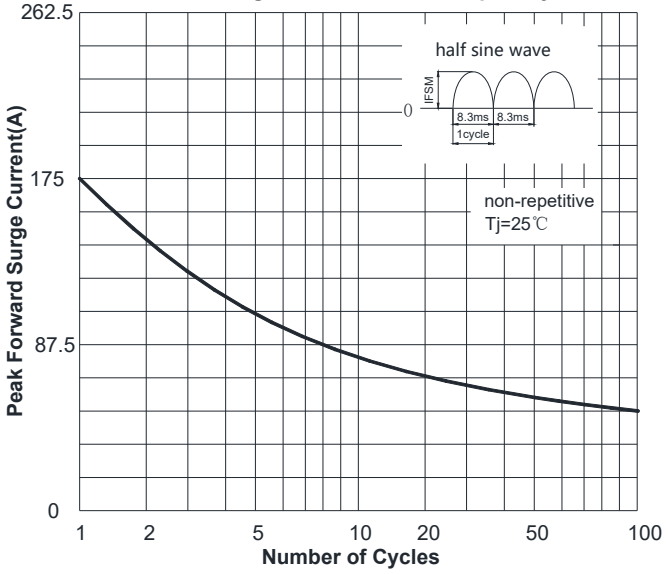


FIG3: Typical Forward Voltage

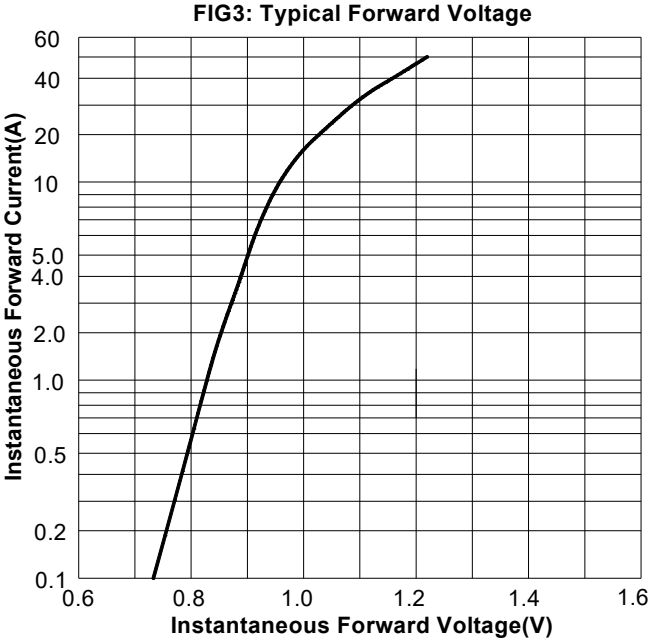
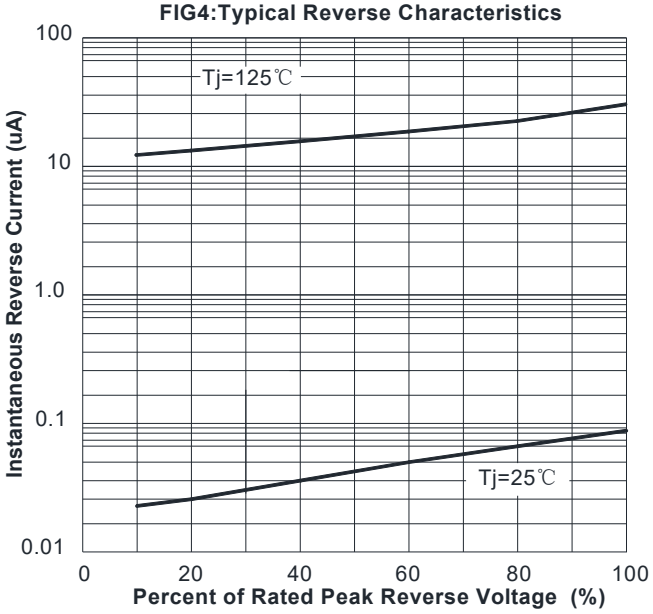
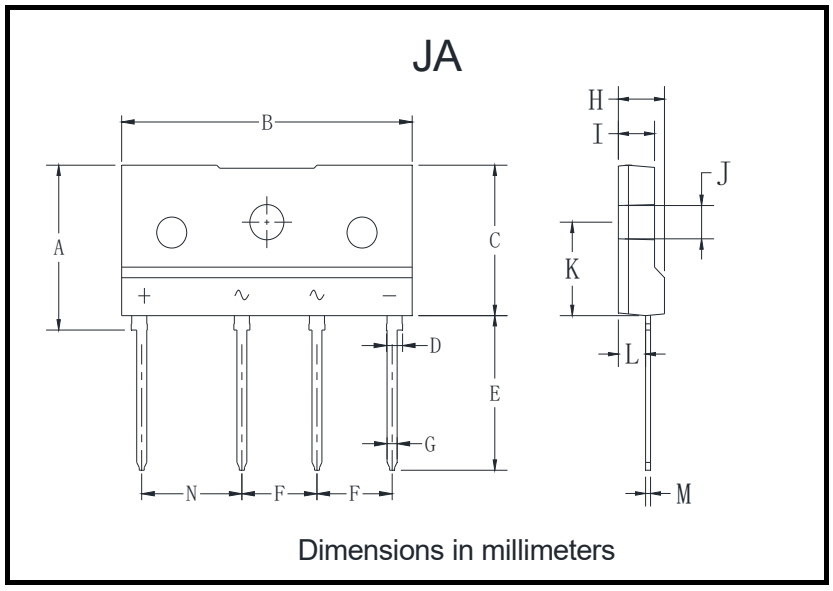


FIG4:Typical Reverse Characteristics



■ 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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