

■ FEATURES

- UL recognition, file #E230084
- Glass passivated chip junction
- 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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	D20JA05	D20JA10	D20JA20	D20JA40	D20JA60	D20JA80	D20JA100
Device marking code			D20JA05	D20JA10	D20JA20	D20JA40	D20JA60	D20JA80	D20JA100
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load	With heatsink T _c =90°C	I _O	A	20.0					
	Without heatsink T _a =25°C			3.3					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	IFSM	A	240						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			480						
Current squared time @1ms≤t≤8.3ms T _j =25°C, rating of per diode	I ² t	A ² S	240						
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						

ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D20JA05	D20JA10	D20JA20	D20JA40	D20JA60	D20JA80	D20JA100	
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =10.0A							1.0	
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C							5	
			T _j =125°C							100	
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C							83	

THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

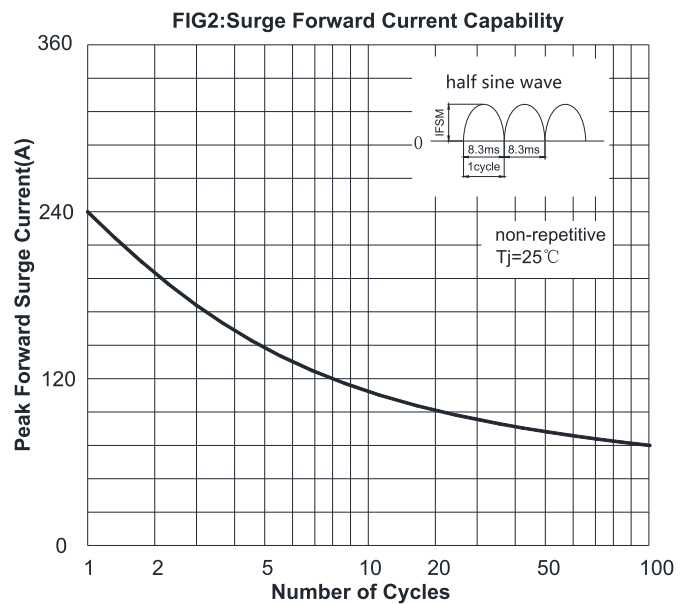
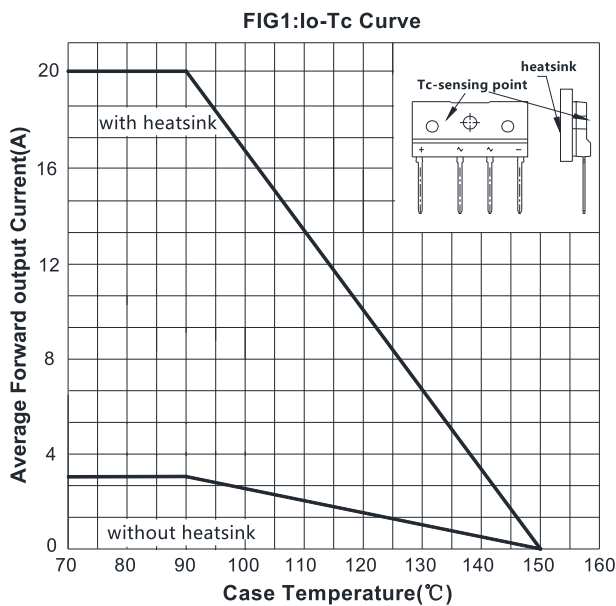
PARAMETER		SYMBOL	UNIT	D20JA05	D20JA10	D20JA20	D20JA40	D20JA60	D20JA80	D20JA100	
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W							22.0	
	Between junction and case, With heatsink	R _{θJ-C}								1.5	

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

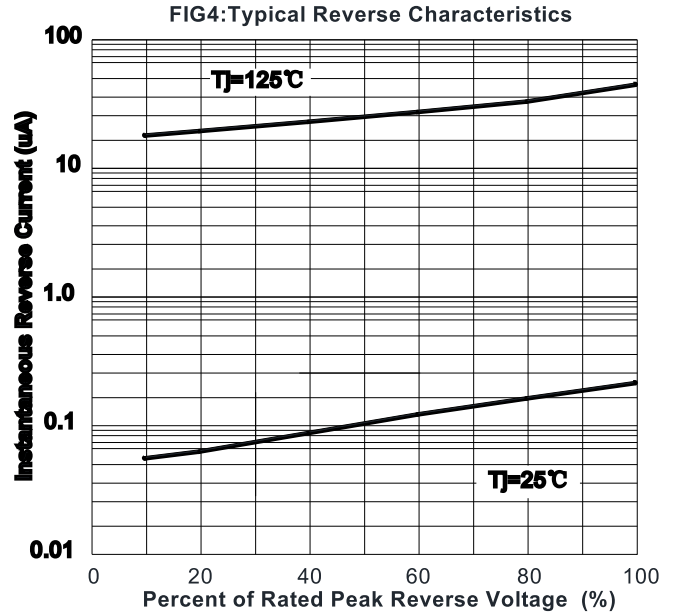
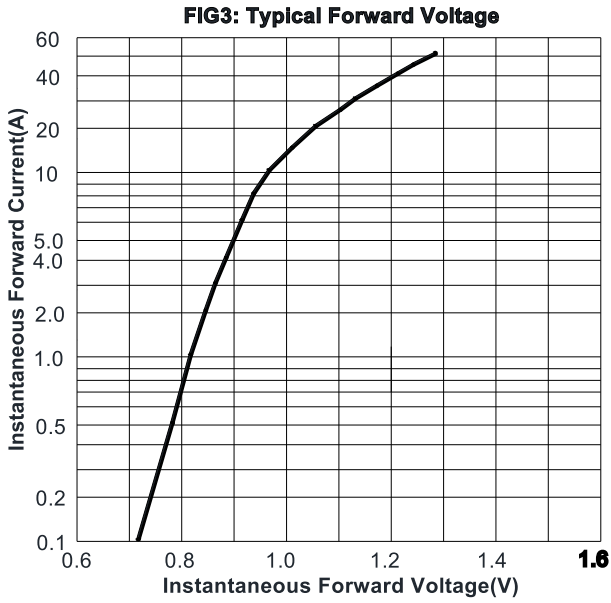
PACKAGING INFORMATION

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D20JA05 ~ D20JA100	B1	Approximate 4.3	15	750	1500	Tube

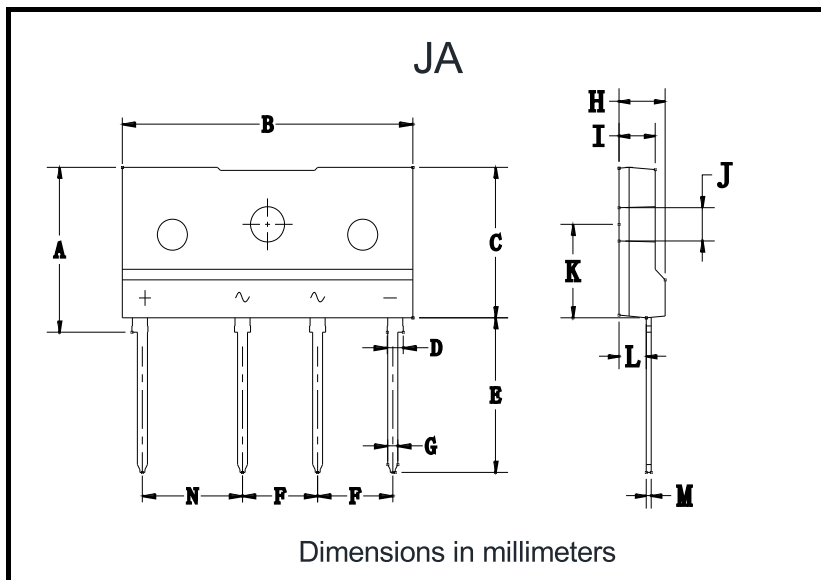
CHARACTERISTICS (TYPICAL)



■ **OUTLINE DIMENSIONS**



■ **SUGGESTED PAD LAYOUT**



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