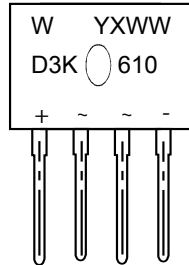


Glass Passivated Bridge Rectifiers



PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	D3K610	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Average Rectified Output Current	I_o	6	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	170	A
$I^2 t$ rating for fusing (1ms < t < 10ms)	$I^2 t$	120	A ² S
Maximum Forward Voltage at 3.0 A	VF	1.1	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	5 500	μA
Typical Junction Capacitance (Note1)	Cj	25	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +175	°C
Typical thermal resistance (Note 2)	RthJC RthJA	16 45	°C/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

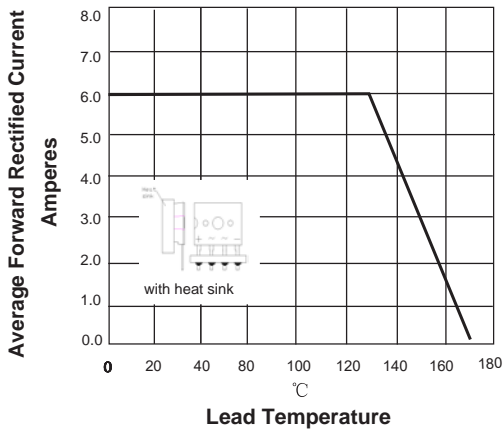


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

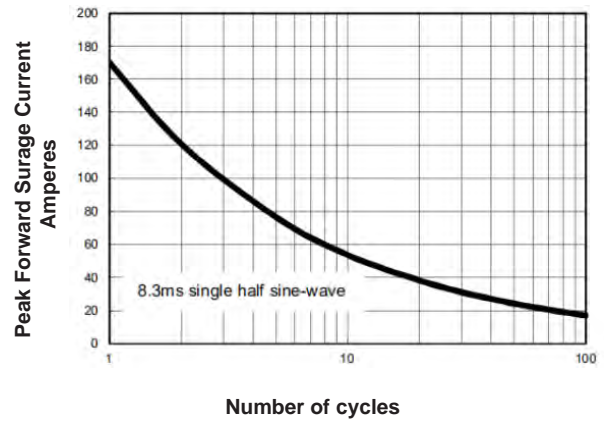


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

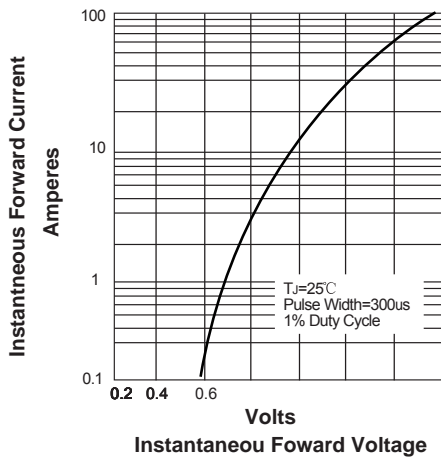
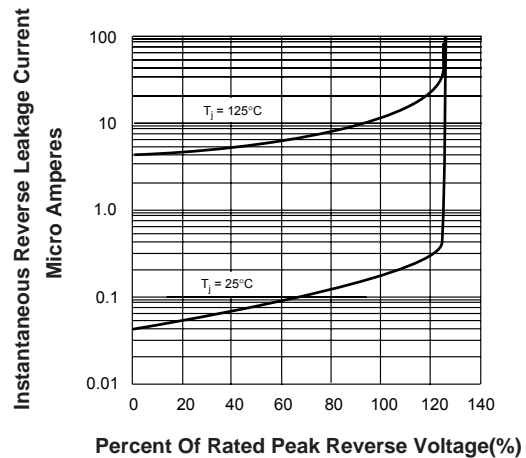
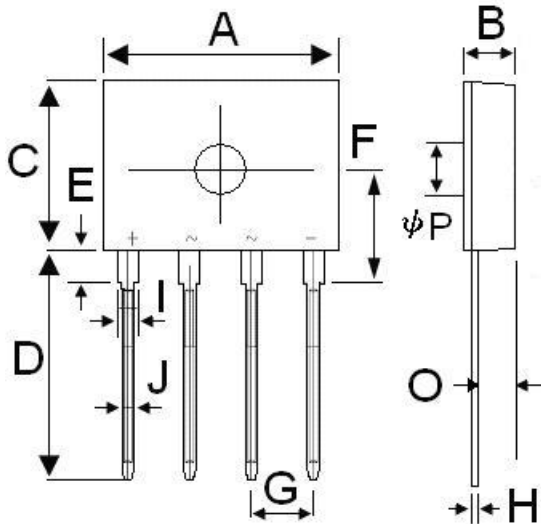


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

D3K



D3K		
Dim.	Min.	Max.
A	14.2	14.7
B	3.30	3.60
C	10.2	10.6
D	13.8	14.4
E	1.8	2.2
F	6.65	7.25
G	3.71	3.91
H	0.3	0.55
I	1.22	1.42
J	0.76	0.86
O	1.8	2.4
P	3.0Φ	3.4Φ
All Dimensions in millimeter		

