

Single Phase 6.0Amp Fast Recovery Bridge Rectifiers

Reverse Voltage - 50 to 1000 V

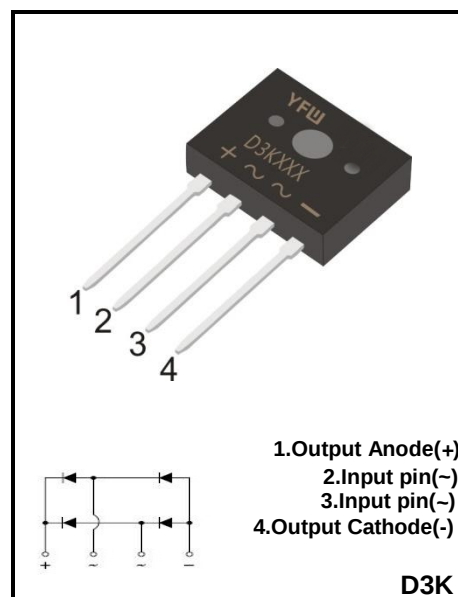
Forward Current – 6.0A

FEATURES

- ♦ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ♦ Idea for printed circuit board
- ♦ Glass passivated Junction chip
- ♦ Low reverse leakage
- ♦ High forward surge current capability
- ♦ High temperature soldering guaranteed
260 °C/10 seconds at terminals

MECHANICAL DATA

- ♦ Case : Molded plastic body
- ♦ Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ♦ Polarity : Polarity symbol marking on body
- ♦ Mounting Position : Any



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	D3K6005FR	D3K601FR	D3K602FR	D3K604FR	D3K606FR	D3K608FR	D3K610FR	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current with heatsink	I _(AV)	6.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Rating for fusing (t=8.3ms, Ta=25 °C)	I²t	93.4							A²S
Maximum instantaneous forward voltage at 6.0A	V _F	1.30							V
Maximum DC reverse current @Ta=25°C at rated DC blocking voltage @Ta=125°C	I _R	5.0 500							µA
Maximum reverse recovery time (Note1)	T _{rr}	150				250	500		ns
Typical junction capacitance (Note 2)	C _J	56.0							pF
Typical thermal resistance	R _{θJA}	55.0							°C/W
Operating junction and storage temperature range	T _j , T _{stg}	-55 ~ +150							°C

Note:

- 1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A
- 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

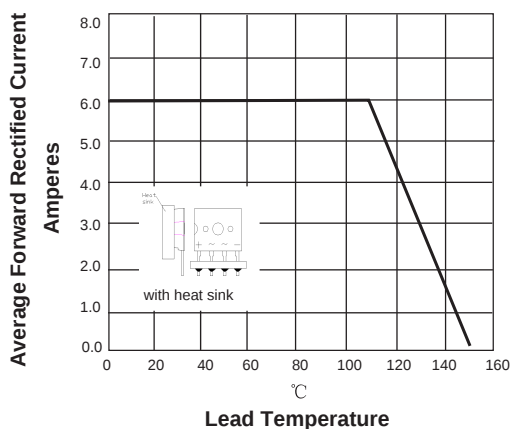


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

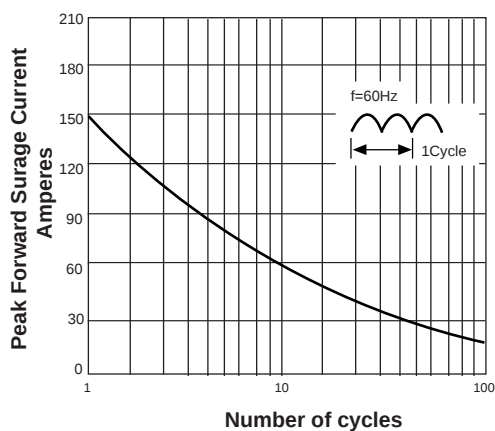


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

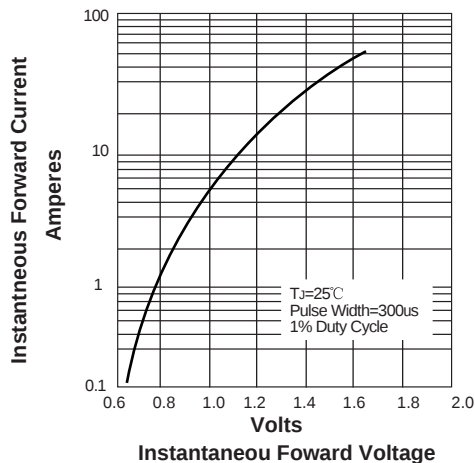
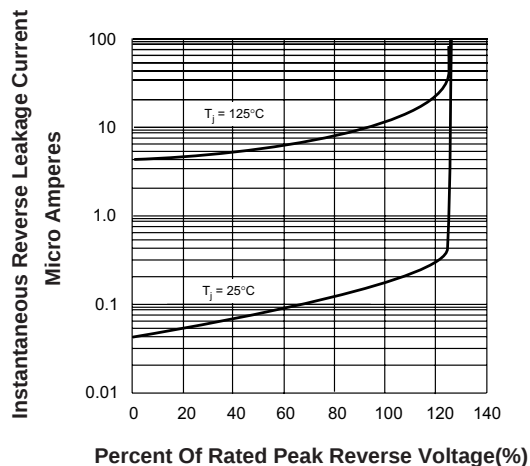
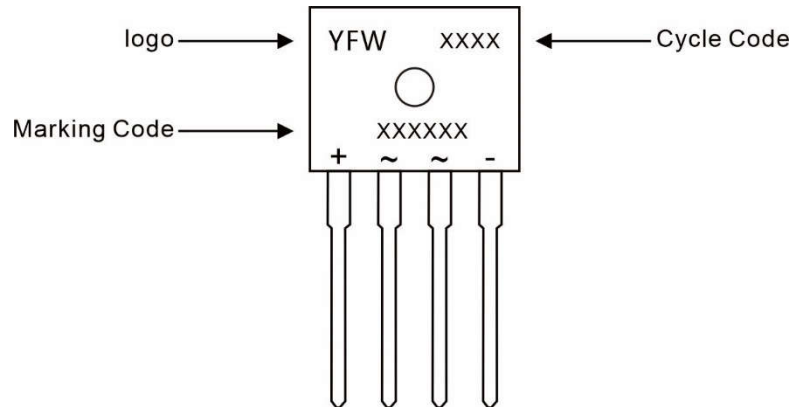


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
D3K	bulk	500PCS/Box 5000PCS/Carton

Package Dimensions

D3K

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	13.5	14.5	0.53	0.57
B	10.0	11.0	0.39	0.43
C	1.8	2.4	0.07	0.09
D	12.8	14.8	0.50	0.58
E	3.76	3.86	0.15	0.15
F	0.65	0.85	0.03	0.03
G	1.2	1.4	0.05	0.06
H	5.0	5.5	0.20	0.22
I	3.05	3.45	0.12	0.14
J	3.1	3.6	0.12	0.14

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