



Bridge Rectifiers

D3KR60 THRU D3KR100 600 to 1000 V 3.0 A

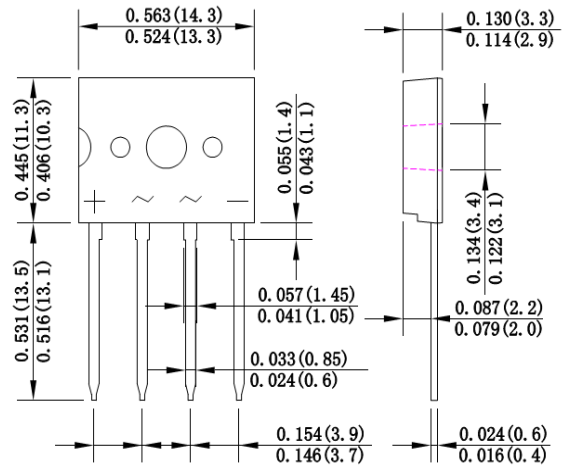
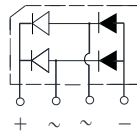
D3K

Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

Features And Mechanical Data

- Package:GBP
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250 °C/10 seconds at terminals applications.
- Terminals: Tin plated leads, solderable per STD-002 and JESD22-B102
- Polarity: As marked on body



Dimensions in inches and (millimeters)

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, derate current by 20%.

Parameter	Symbols	D3KR60	D3KR80	D3KR100	Units
Type number marking code		D3KR60	D3KR80	D3KR100	
Maximum recurrent peak reverse voltage	VRRM	600	800	1000	Volts
Maximum rms voltage	VRMS	420	560	700	Volts
Maximum dc blocking voltage	VDC	600	800	1000	Volts
Maximum average forward rectified current. Lead length Sine wave 60Hz resistive or Inductive Load	I(AV)	3.0 (Note 1)(RΘJC)			Amp
Peak forward surge current, 8.3 ms single half- sine-wave Superimposed on rated load (jedec method) (rating of per diode)	IFSM	80			Amp
Maximum instantaneous forward voltage drop per diode at 1/2 I(AV)	VF	1.0			Volts
Maximum DC reverse current at rated DC blocking voltage per	IR	5 500			uA
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I²t	26			A²S
Max Reverse recovery time @IF= 0.5A, Irr=0.25A, IR=1.0A	Trr	350			nS
Typical thermal resistance between junction and ambient	RΘJA	70(Note 3)			°C/W
Typical thermal resistance between junction and case	RΘJC	30(Note 2)			°C/W
Typical thermal resistance between junction and lead	RΘJL	25(Note 3)			°C/W
Junction temperature	Tj	-65 to +150			°C
Storage temperature range	Tstg	-65 to +150			°C

Note:

1. Mounted on FR-4 2 ounce glass epoxy PCB board with 1.3*1.3mm solder pad areas
2. Units case mounted on aluminum plate heatsink 4.0 x 4.0 x 0.15 cm, 9.5 mm lead length
3. Without heatsink, accordance with JESD-51.



Bridge Rectifiers

D3KR60 THRU D3KR100 600 to 1000 V 3.0 A

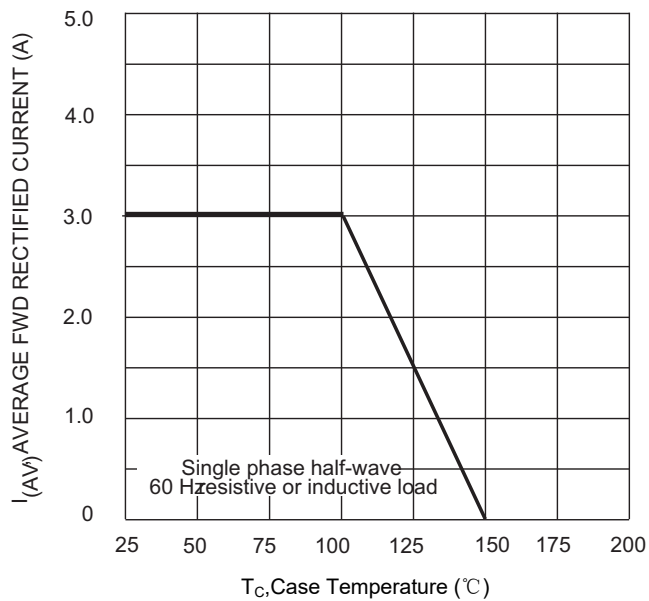


Fig. 1 Forward Derating Curve

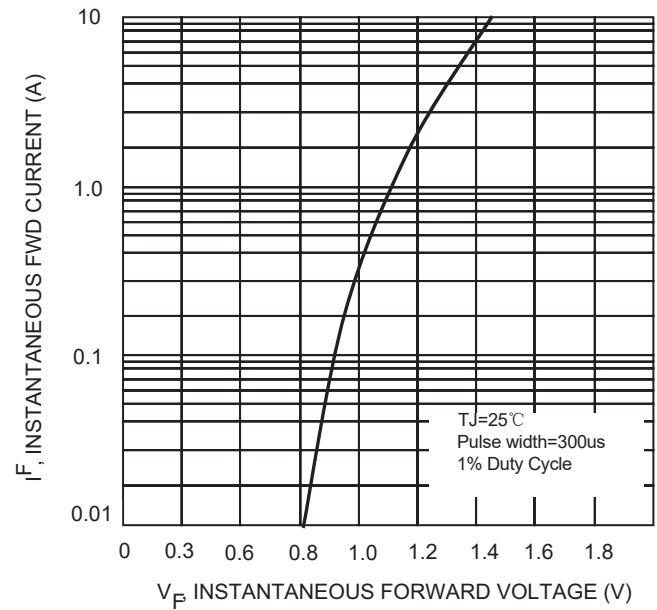


Fig. 2 Typical Forward Characteristics

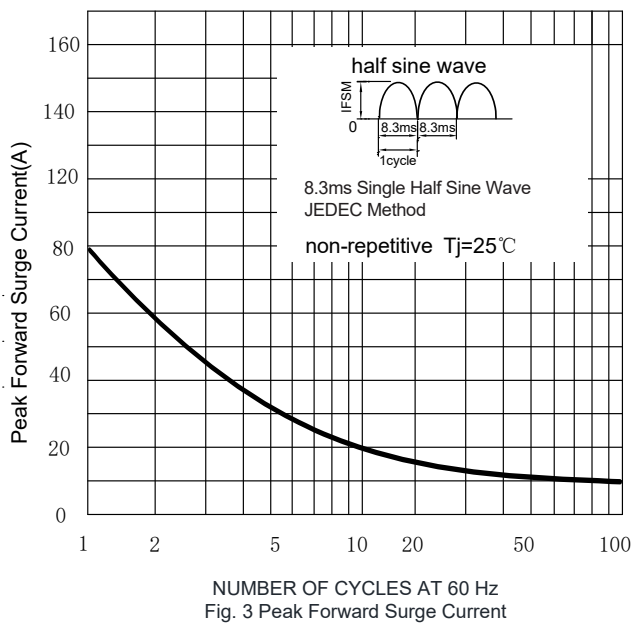


Fig. 3 Peak Forward Surge Current

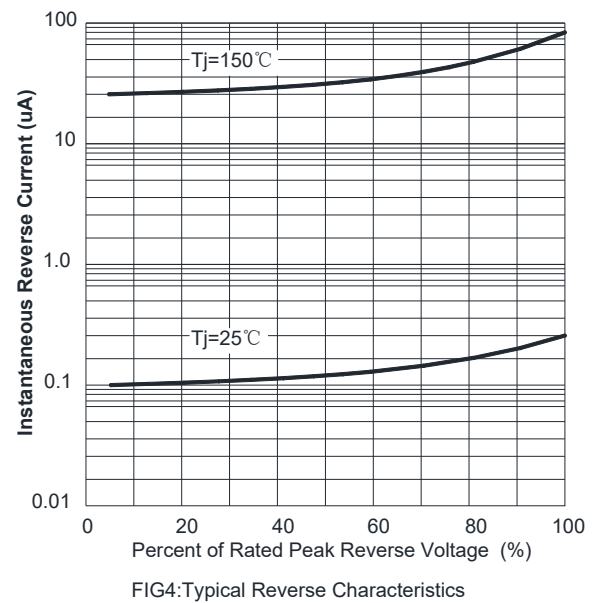


FIG4: Typical Reverse Characteristics