DXK810

PANJIT SEMICONDUCTOR

Glass Passivated Bridge Rectifier

DXK

| Voltage | 1000 V | Current | 8A |

Features

HF

- Ideal for printed circuit boards
- Lead free in compliance with EU RoHS 2.0
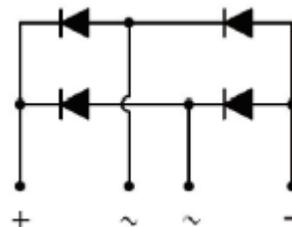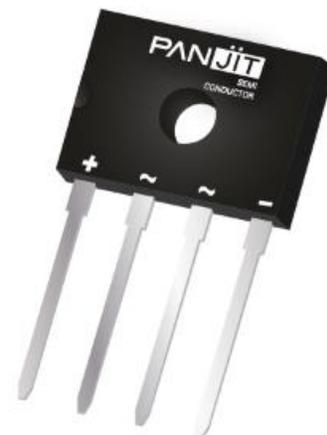- Halogen-free according to IEC 61249 standard

Mechanical Data

- Case : DXK Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0455 ounces, 1.29 grams

Application

- USB PD & NB Adapter(<65W)
- Monitor power adapter (<100W)
- Consumer Power (<150W)
- Quick Charger (>45W)

Key Parameters	
Parameter	**Value**
V_{RRM}	1000V
$I_F(AV)$	8A
I_{FSM}	170A
I_R	5uA
Package	DXK

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Maximum Ratings and Thermal Characteristics (T_A = 25 ^{o}C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1000	V
Maximum RMS Voltage		V_{RMS}	700	V
Maximum DC Blocking Voltage		V_{DC}	1000	V
Maximum Average Forward Current	With heatsink	$I_{F(AV)}$	8	A
	Without heatsink		1.7	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 ℃	I_{FSM}	170	A
	@ T_A = 125 ℃		136	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ T_A = 25 ℃	I_{FSM}	290	A
	@ T_A = 125 ℃		218	
I^2 t rating for fusing (t = 8.3ms)		I^2 t	120	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V		C_J	50	pF
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	10	$^oC/W$
		$R_{\theta JL}$	8	
		$R_{\theta Jc}$	6	
Operating junction and storage temperature range		T_J, T_{STG}	-55~150	^oC
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

Electrical Characteristics (T_A = 25 ^{o}C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 4 A, T_J = 25 ^{o}C	-	-	1.05	V
Reverse Current	I_R	V_R = 1000 V, T_J = 25 ^{o}C	-	-	5	uA
		V_R = 1000 V,T_J= 125 ^{o}C	-	-	100	

NOTES :
1. Device mounted on cooling platform radiator.

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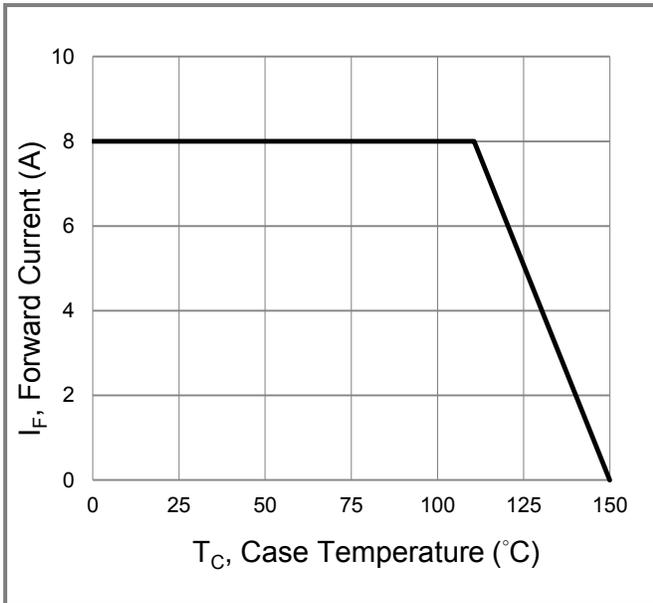## TYPICAL CHARACTERISTIC CURVES

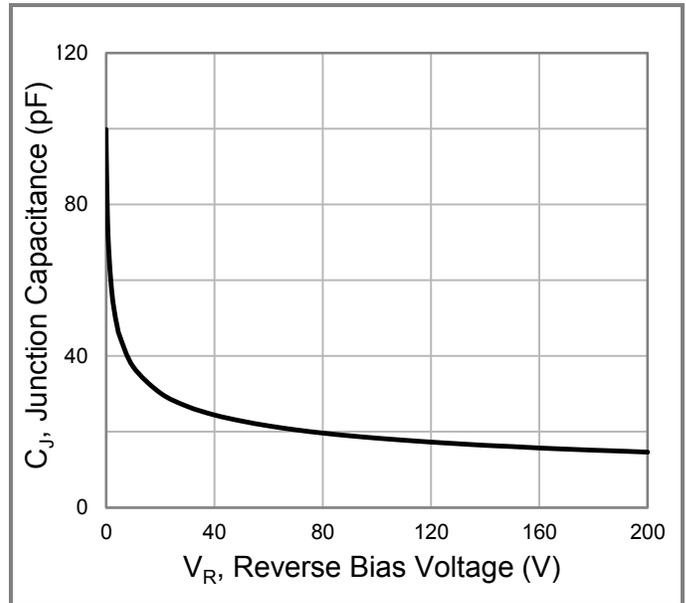**Fig.1 Forward Current Derating Curve**

Fig.2 Typical Junction Capacitance
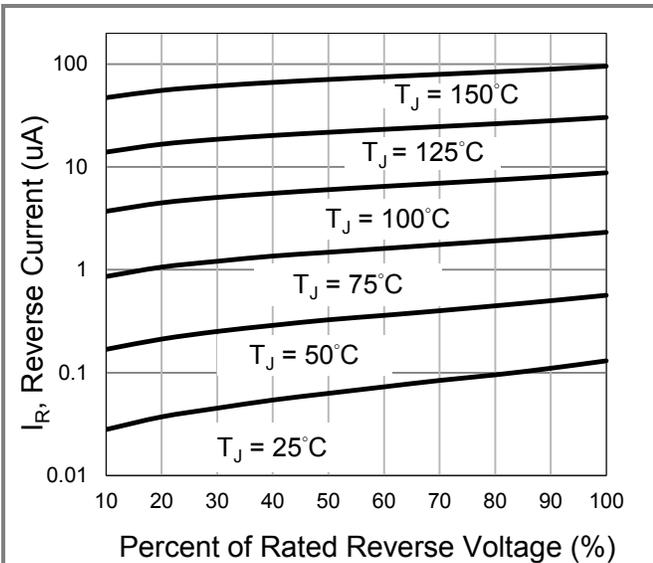
Fig.3 Typical Reverse Characteristics
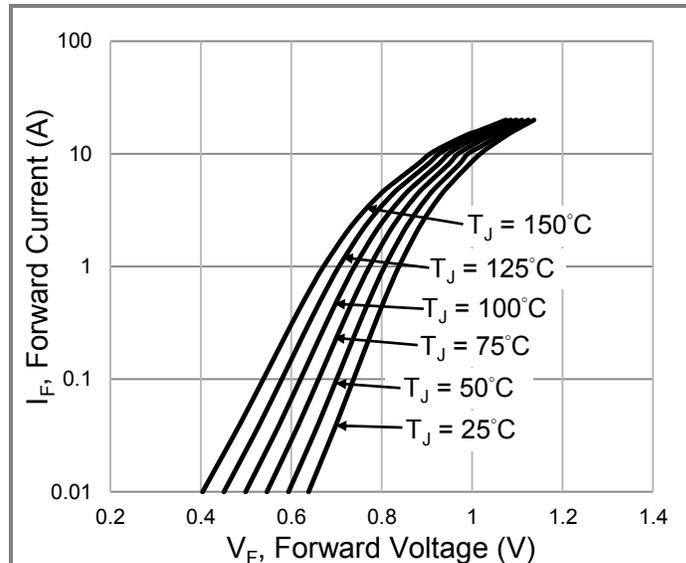
Fig.4 Typical Forward Characteristics
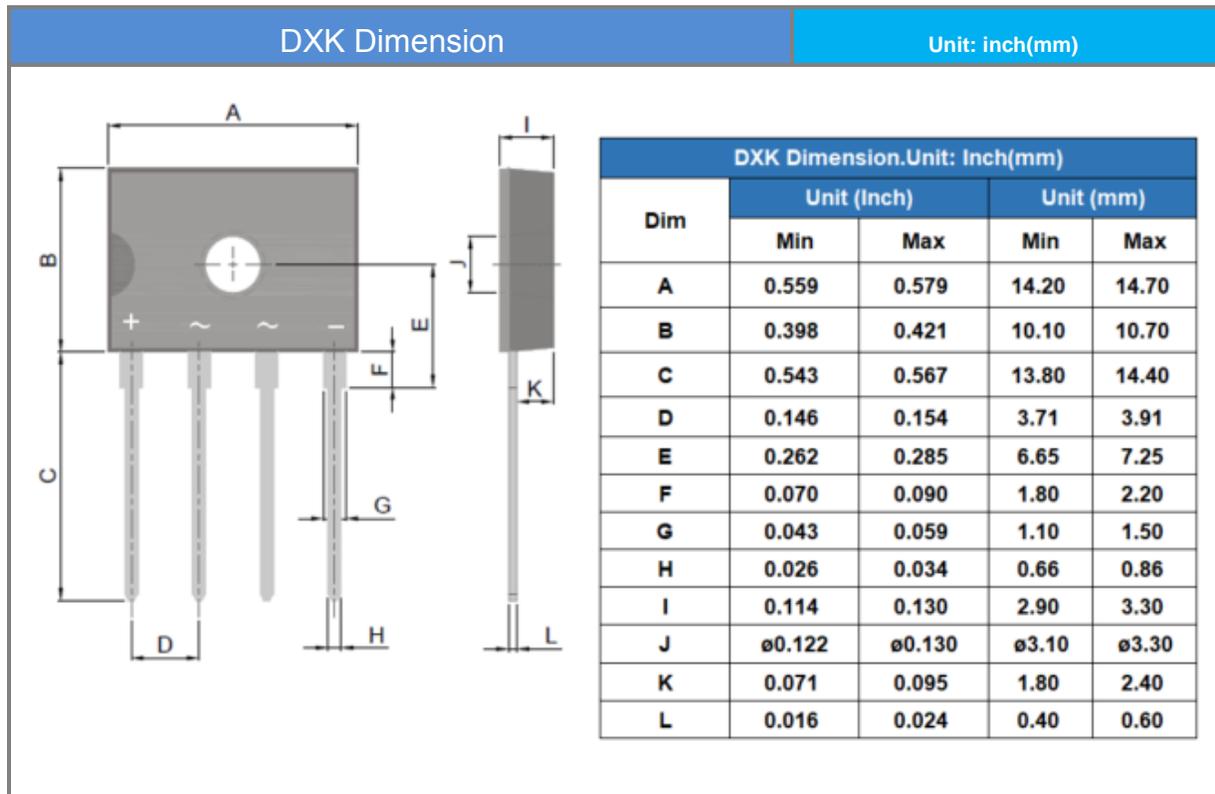
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Part No. Marking Code Version

Approved Part No.	Package Type	Packing Type	Marking
DXK810	DXK	35pcs / Tube	DXK810

Packaging Information

DXK Dimension		Unit: inch(mm)	

DXK Dimension.Unit: Inch(mm)				
Dim	**Unit (Inch)**		**Unit (mm)**	
	Min	**Max**	**Min**	**Max**
A	0.559	0.579	14.20	14.70
B	0.398	0.421	10.10	10.70
C	0.543	0.567	13.80	14.40
D	0.146	0.154	3.71	3.91
E	0.262	0.285	6.65	7.25
F	0.070	0.090	1.80	2.20
G	0.043	0.059	1.10	1.50
H	0.026	0.034	0.66	0.86
I	0.114	0.130	2.90	3.30
J	ø0.122	ø0.130	ø3.10	ø3.30
K	0.071	0.095	1.80	2.40
L	0.016	0.024	0.40	0.60

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