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# 10A, 600V - 1000V Glass Passivated Single-Phase Bridge Rectifiers

#### **FEATURES**

- Thin Single in-line low profile package ideal for compact required circuit
- Glass passivated junction
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



**KBJL** 

- 55 to +150





#### **MECHANICAL DATA**

Case: KBJL

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 0.56 Nm max. (5 in-lbs. max.)

Weight: 2.5g (approximately)

PARAMETER	SYMBOL	TS10KL60	TS10KL80	TS10KL100	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	10			Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	180			А
Rating of fusing ( t<8.3ms)	l <sup>2</sup> t	134			A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) $I_F$ = 5 A	V <sub>F</sub>	1.0		V	
Maximum reverse current @ rated $V_R$ $T_J$ =25 °C $T_J$ =100 °C	I <sub>R</sub>	5 150			μΑ
Typical thermal resistance (Note 2)	$R_{ heta JC}$	1.5			°C/W
Operating junction temperature range	TJ	- 55 to +150		°C	
					1

 $\mathsf{T}_{\mathsf{STG}}$ 

Note 1: Pulse test with PW=300 µs, 1% duty cycle

Storage temperature range

Note 2: Mount on Heatsink size of 4" x 6" x 0.25" Al-Plate

°C



ORDERING INFORMATION						
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX <sup>(*)</sup>	PACKAGE	PACKING	
TS10KLXX (Note 1)	Н	D3	G	KBJL	20 / TUBE	

Note 1: "xx" defines voltage from 600V (TS10KL60) to 1000V (TS10KL100)

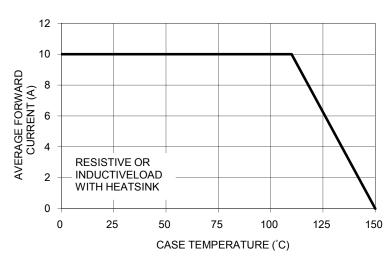
<sup>\*:</sup> Optional available

EXAMPLE						
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION	
TS10KL80HD3G	TS10KL80	Н	D3	G	AEC-Q101 qualified Green compound	

#### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)





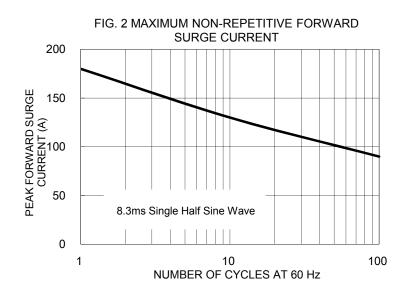
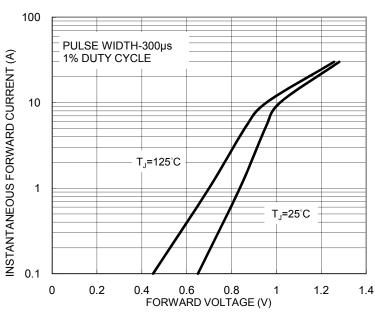
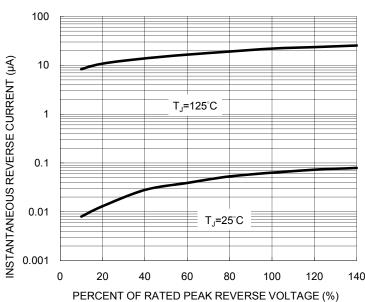


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

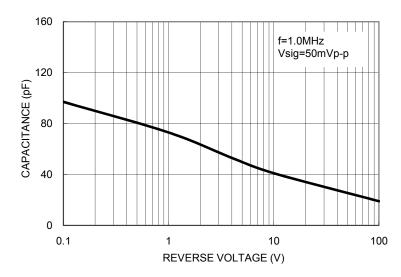




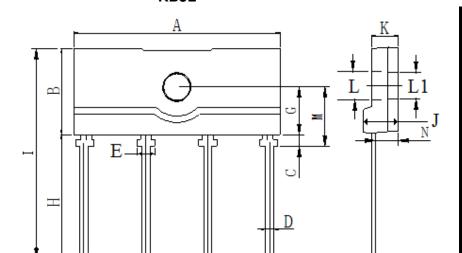




### FIG. 5 TYPICAL JUNCTION CAPACITANCE

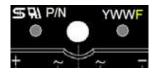


## PACKAGE OUTLINE DIMENSIONS **KBJL**



DIM.	Unit	(mm)	Unit (inch)		
	Min	Max	Min	Max	
Α	24.70	25.30	0.972	0.996	
В	10.00	10.60	0.394	0.417	
С	1.20	1.60	0.047	0.063	
D	0.90	1.10	0.035	0.043	
Е	2.10	2.30	0.083	0.091	
F	7.30	7.70	0.287	0.303	
G	5.50	5.90	0.217	0.232	
Н	14.40	15.40	0.567	0.606	
I	24.90	25.50	0.980	1.004	
J	4.00	4.40	0.157	0.173	
K	3.00	3.40	0.118	0.134	
L	3.30	3.50	0.130	0.138	
L1	3.10	3.30	0.122	0.130	
М	6.90	7.30	0.272	0.287	
N	2.50	2.90	0.098	0.114	
0	0.30	0.70	0.012	0.028	

### **MARKING DIAGRAM**



P/N = Specific Device Code

0

YWW = Date Code

F = Factory Code





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