

## SILICON BRIDGE DIODE SPECIFICATION

1. Absolute Maximum Ratings ( $T_c=25^\circ\text{C}$  unless otherwise specified) ( )Reference value

Item	Symbol	Conditions	Ratings	Unit	
Storage temperature	Tstg		-55 ~ 150	°C	
Operating junction temperature	Tj		150		
MAX reverse voltage	VRM		800	V	
Average rectified forward current	Io	60Hz, Sine wave resistance load	With heat-sink $T_c=108^\circ\text{C}$	8	A
			No heat-sink $T_a=26^\circ\text{C}$	2.2	
Peak surge forward current	IFSM	60Hz sine wave, Non-repetitive 1cycle peak value $T_j=25^\circ\text{C}$	200	A	
	IFSM 1	tp=1ms, $T_j=25^\circ\text{C}$ Non-repetitive	575		
Current squared time	I <sup>2</sup> t	1ms ≤ t < 8.3ms $T_j=25^\circ\text{C}$ per diode	166	A <sup>2</sup> s	
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2.0	kV	
Mounting torque	TOR	( )Shows recommended value	0.8(0.5)	N·m	

2. Electrical Characteristics ( $T_c = 25^\circ\text{C}$  unless otherwise specified) \* per diode

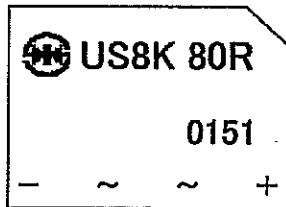
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =4A	Pulse measurement	*	MAX 1.00	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub>	Pulse measurement	*	MAX 10	μA
Thermal resistance	θ <sub>jc</sub>	Junction to case, with heat-sink			MAX 2.8	°C/W
	θ <sub>jl</sub>	Junction to lead, no heat-sink	※		MAX 5	
	θ <sub>ja</sub>	Junction to ambient no heat-sink	※		MAX 35	

3. Outline

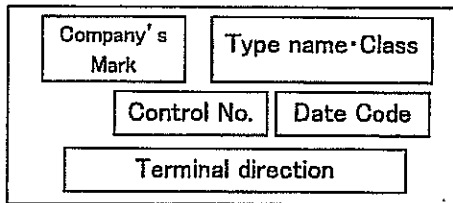
Package name : D6K Package

DWG No. : 3SK-990203

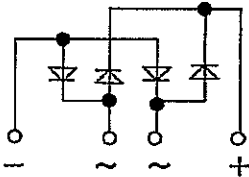
4. Marking



① ② ③ ④  
Date code : Christian year end on, and month (1~9, O, N, D)  
Control No. : 01~99



5. Terminal connection



6. Material

Lead : Material【Cu】 Plating【Sn-Bi】  
Case : Epoxy resin(Black), UL94;V-0

REFERENCE ONLY  
参 考

Please acknowledge that the specification might changes without the refusal occasionally.

				MANAGER	Customer's :	
4	MAY.27.2005	Arai	Correction		Type Name : US8KB80R	
3	MAY.16.2005	Arai	Correction			
2	MAR.07.2005	Arai	Correction			
1	FEB.01.2005	Arai	Newly			
	DATE	DEGD.	DESCRIPTION	CHKD	Code No.:	
SHINDENGEN ELECTRIC MFG.CO.,LTD. SEMICONDUCTOR DIV. DEVICES DEVELOPMENT DEPT.1 DEVICES DEVELOPMENT SECT.3					DWG No. 3SK-050049	EDIT -4