

**PLASTIC SEALED HIGH VOLTAGE SILICON RECTIFIER STACK**

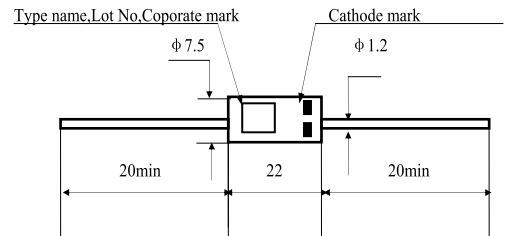
**Features:**

- Silicon Rectification Diode

**Application:**

- For high voltage rectification for "MWO of frequency conversion"

**■ OUTLINE DRAWINGS Unit:mm**



Mark	CL08 -08	← Type name
	R G X XX	
	Year code (e.g.: 2017--7, 2018--8,...)	Month code. (e.g.: 01, 02...10, 11, 12)

**MAX.RATED VALUE**

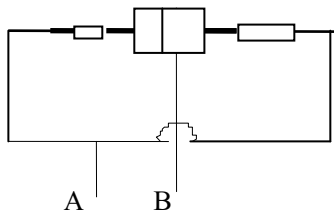
Rated Value	Sign	Condition	R8KH	Unit
Peak Reverse Repetitive Voltage	$V_{RRM}$		8.7	kV
Reverse Surge Current	$I_{RSM}$	width 1ms triangle wave single pulse	0.2	A
Average Forward Rectifier Current	$I_O$		0.38	A
Max. Irrepetitive Surge current	$I_{FSM}$	Ta=25°C " rated load" half cycle" single phase" 50Hz	15	A
Maximum Junction Temperature	Tj	half cycle sinewave peak voltage	130	°C
Store Temperature	Tstg		-40~+130	°C

**Electric Characteristic**

Rated Value	Sign	Condition	R8KH	Unit
Max Forward Voltage Drop	V	$I_F=0.35A$	14	V
Max. Reverse Recovery Time	trr	$I_F=I_R=100mA$ 90% Value.	0.15	μS
Max. Normal Temperature Reverse Current	$I_{R1}$	$V_R=V_{RRM}$ " 25 °C	5.0	μA
Max. High Temperature Reverse Current	$I_{R2}$	$V_R=V_{RRM}$ " 100 °C	50	μA
Reverse Breakdown Voltage	$V_{br}$	$I_R=100\mu A$	8.7	kV

## RATING AND CHARACTERISTICS CURVES (R8KH)

Fig.1 Insulation resistance test and insulation strength test



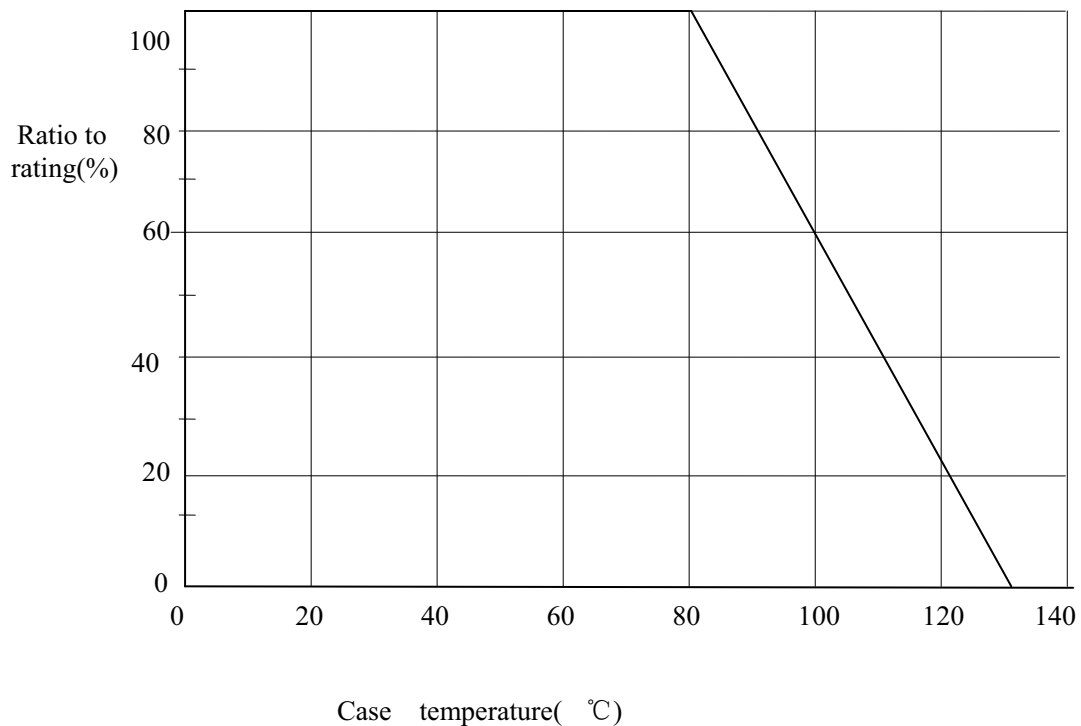
Roll metal foil with 3mm width around center of the body

Insulation resistance test condition: Measure between A and B by using a DC 500V insulation resistance tester.

Insulation strength test condition: Apply half sine wave voltage with 10KV wave height between A and B in insulation liquid .

Fig2. Derating of forward current for ambient temperature

(On condition of provision of a fin on cathode side and air cooling)



## RATING AND CHARACTERISTICS CURVES (R8KH)

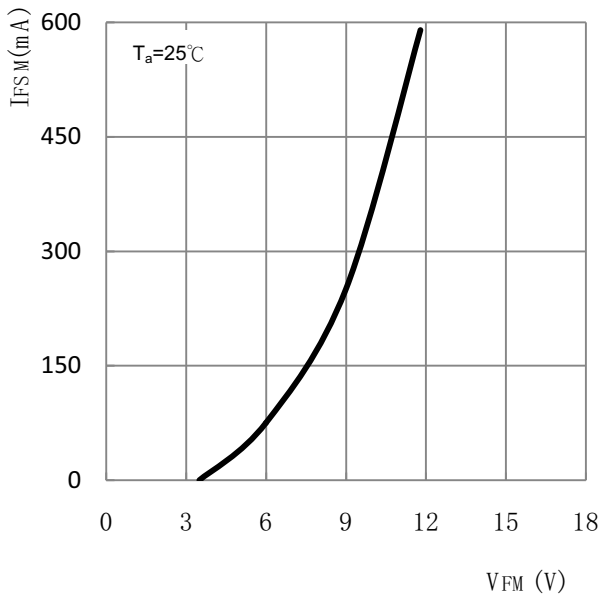


Figure 3. Forward characteristics

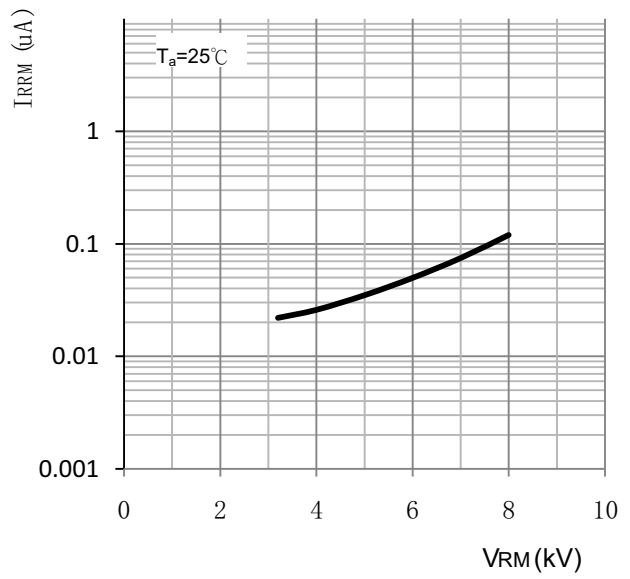


Figure 4. P -  $I_o$  Curve

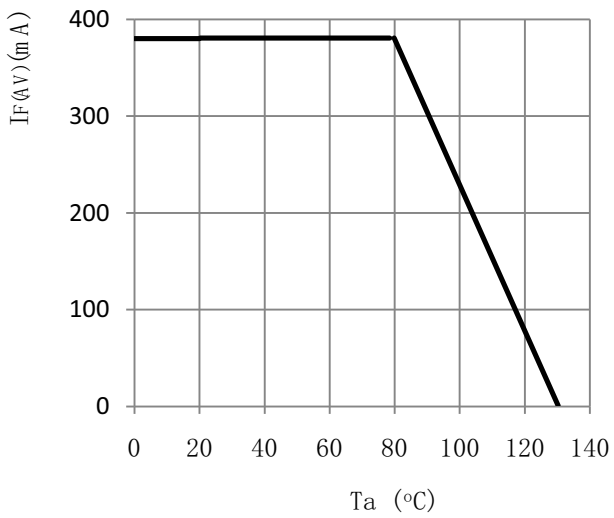
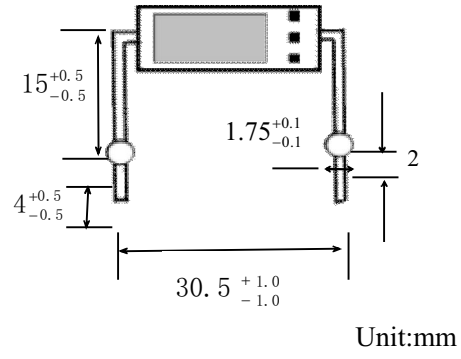


Figure 5.  $I_{F(AV)}$  -  $T_a$  Derating

# R8KH-H45



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

PACKAGE	PACKING CODE	BAG (EA)	BAG SIZE(mm)	PER BOX (EA)	BOX SIZE (mm)	CARTON SIZE(mm)	PER CARTON (EA)
R8KH	-B	100	140*135	1,000	350*130*105	555*370*155	5,000

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