

Surface Mount High Voltage Silicon Rectifier

Peak Reverse Voltage: 8 KV

Average Forward Current: 5 mA

Reverse Recovery Time: 100 ns

SMAW (SMA Wire)



Features

- Low profile package
- Low leakage current
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Typical Applications

- For use in high voltage rectification of ozone ion generator

Mechanical Data

- Case:SMAW Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

Ratings at TA=25°C (unless otherwise specified)

Parameter	Symbol	2CL71S	Unit
Marking		71S	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	8000	V
Maximum Non-Repetitive Peak Reverse Voltage	V _{RSM}	8800	V
Maximum average forward rectified current (Note1)	I _{F(AV)}	5	mA
Peak forward surge current 10 ms single half sine-wave superimposed on rated load	I _{FSM}	0.5	A
Storage temperature range	T _S	-55 ~ 150	°C
Operating Junction temperature range	T _J	-55 ~ 150	°C

Note1: Mounted on PCB with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas.

Electrical characteristics

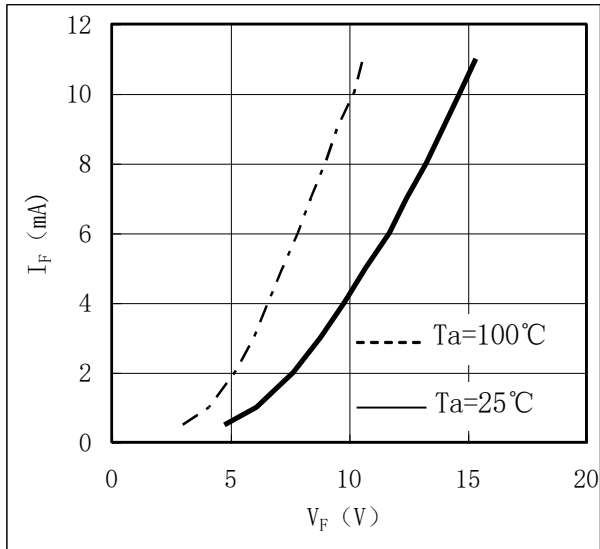
Ratings at TA=25°C (unless otherwise specified)

Parameter	Test Conditions	Symbol	2CL71S	Unit
Maximum forward voltage	I _F = 10 mA	V _F	16.0	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	2.0	μA
	TA=100°C		50	
Maximum Reverse Recovery Time	I _F =2mA, I _{RM} =4 mA Fore edge of pulse less than 0.01 μs	T _{rr}	100	ns

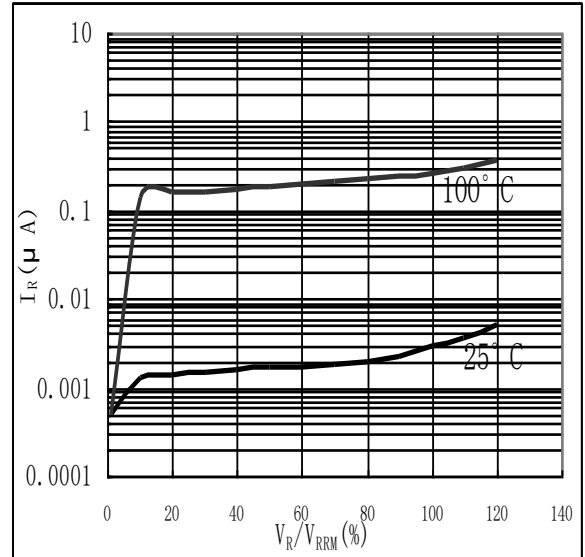
Typical Characteristics

Electricity characteristics

◇ V_F & I_F curve

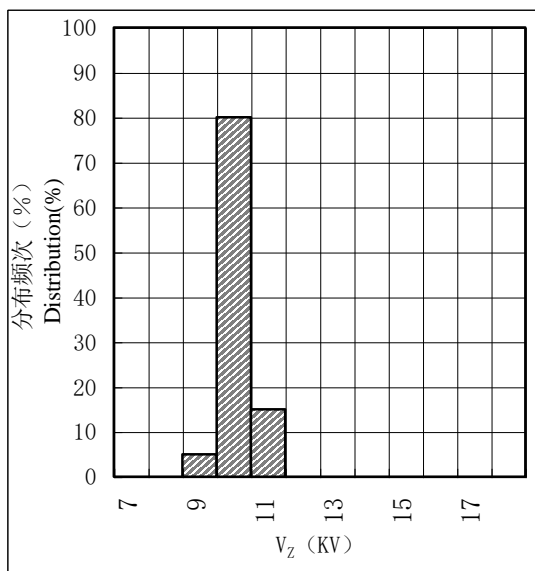


◇ V_R & I_R curve

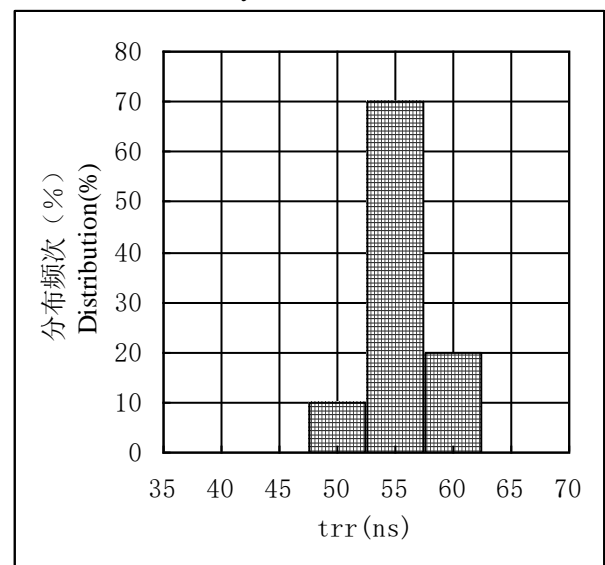


Electricity parameter distributing

◇ Breakdown voltage



◇ Reverse recovery time



Package Outline Dimensions in mm (inches) SMAW

