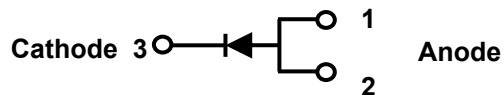


Surface Mount General Purpose Silicon Rectifiers Reverse

S5JSP TO-277



Features

- For surface mounted applications.
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives.

Mechanical Data

- Package: TO-277
- Lead: lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

■Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbols	S5JSP	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Maximum RMS voltage	V _{RMS}	420	V
Maximum DC Blocking Voltage	V _{DC}	600	V
Maximum Average Forward Rectified Current	I _(AV)	5.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	180	A
I ² t rating for fusing (1ms < t < 8.3ms)	I ² t	134.5	A ² S
Maximum Forward Voltage at 5.0A and 25°C	V _F	1.0	V
Maximum DC Reverse Current @T _A =25 °C at Rated DC Blocking Voltage @T _A =125 °C	I _R	5 100	μA
Typical Junction Capacitance (Note1)	C _j	15	pF
Operating and Storage Temperature Range	T _j , T _{stg}	-50 ~ +150	°C
Typical Thermal Resistance(2)	R _{θJA}	35	°C/W
	R _{θJC}	13	°C/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Valid provided that electrodes are kept at ambient temperature.

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

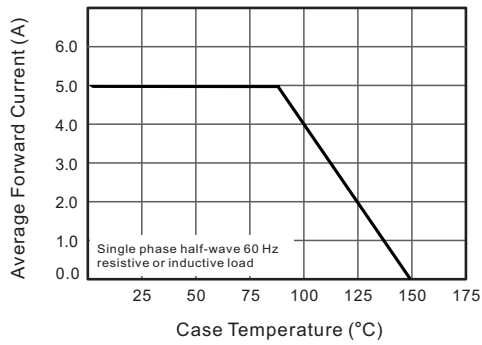


Fig.2 Typical Reverse Characteristics

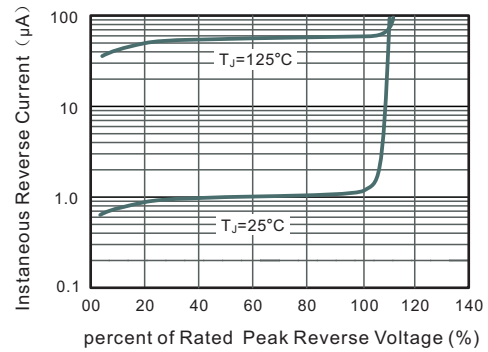


Fig.3 Typical Forward Characteristic

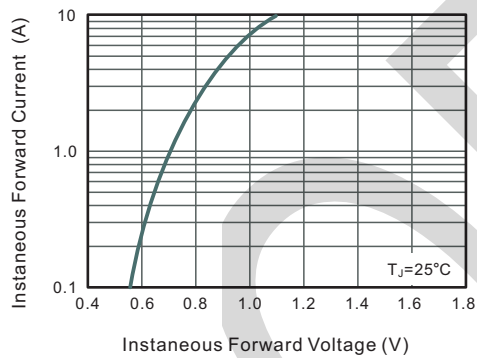


Fig.4 Typical Junction Capacitance

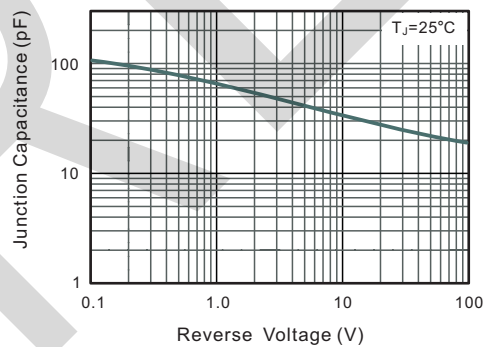
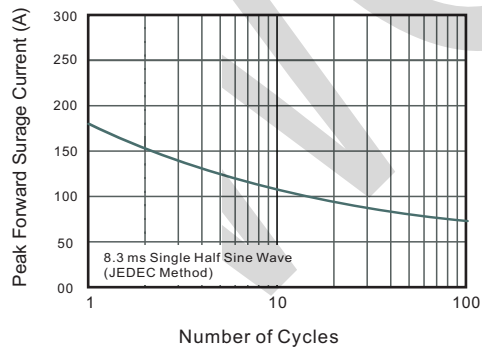
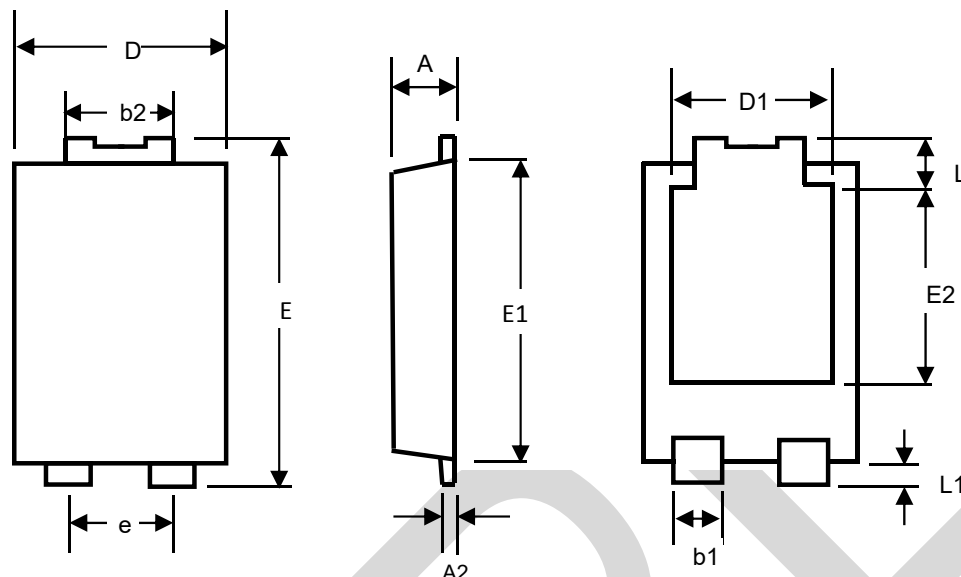


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE DIMENSIONS

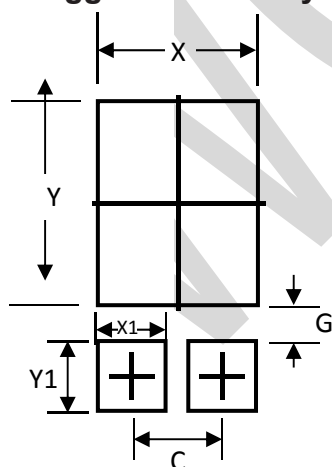
TO-277



TO-277 mechanical data

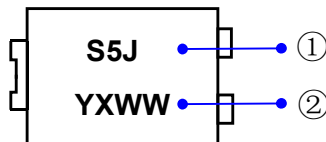
UNIT		A	A2	b1	b2	D	D1	E	E1	E2	L	L1
mm	max	1.3	0.4	1.0	1.9	4.3	3.05	6.6	5.75	3.55	1.0	0.7
	min	1.1	0.2	0.8	1.7	3.9		6.4	5.3		0.8	0.5
mil	max	51.18	15.75	39.37	74.80	169.3	120.0	259.8	226.3	139.7	39.37	27.55
	min	43.30	7.87	31.49	66.93	153.5		252.0	208.6		31.49	19.69

TO-277 Suggested Pad Layout



UNIT		C	G	X	X1	Y	Y1
mm	min	1.80	0.90	3.4	1.4	4.9	1.4
mil	min	78.86	35.43	133.86	35.43	192.91	55.12

Marking Information



①Product model :S5JSP Referred to as S5J

②PDC information :

Y X WW

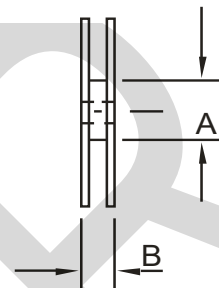
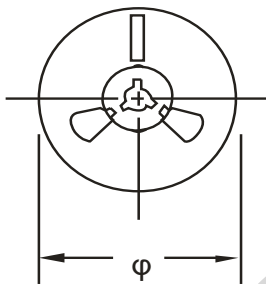
WW:Week code(01 to 53)

X:Internal identification code

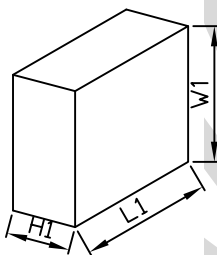
Y:Year code(ex:0=2020)

Packaging Information

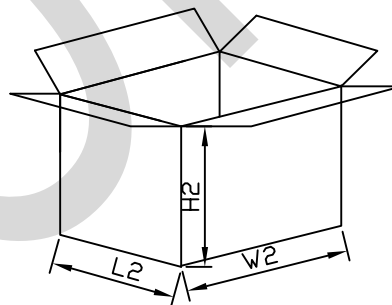
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		330	70	15	335	335	43	360	360	360
QTY	PCS	Smallest package,5000PCS/reel			10,000PCS,2 reel in total			80,000PCS/carton,8 boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									