



ES1AL - ES1JL

1.0 AMP. Surface Mount Super Fast Rectifiers

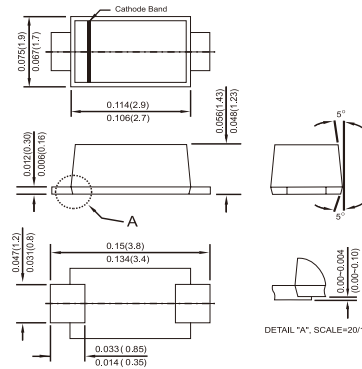
Sub SMA

Features

- ✧ For surface mounted application
- ✧ Low profile package
- ✧ Low power loss, high efficiency,
- ✧ Ideal for automated placement
- ✧ Glass passivated chip junction
- ✧ High temperature soldering: 260°C/10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✧ Cases: Sub SMA plastic case
- ✧ Terminal : Pure tin plated, lead free.
- ✧ Polarity: Color band cathode end
- ✧ Packing: 8mm /12mm tape per EIA STD RS-481
- ✧ Weight: 0.015 grams



Dimensions in inches and (millimeters)

Marking Diagram



- EXL = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	ES 1AL	ES 1BL	ES 1CL	ES 1DL	ES 1FL	ES 1GL	ES 1HL	ES 1JL	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current See Fig. 1	IF(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	VF	0.95				1.3		1.7		V
Maximum DC Reverse Current at @ TA=25°C Rated DC Blocking Voltage(Note 1)@ TA=125°C	IR					5.0 100				uA uA
Maximum Reverse Recovery Time (Note 2)	Trr					35				nS
Typical Junction Capacitance (Note 3)	Cj	10				8				pF
Maximum Thermal Resistance (Note 4)	RθJA RθJL					85 35				°C/W
Operating Temperature Range	TJ					-55 to +150				°C
Storage Temperature Range	TSTG					-55 to +150				°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$
3. Measured at 1 MHz and Applied $V_R=4.0$ Volts
4. P.C.B. Mounted on 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Area.

RATINGS AND CHARACTERISTIC CURVES (ES1AL THRU ES1JL)

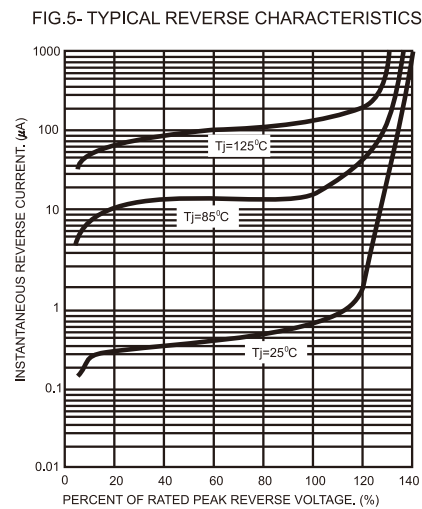
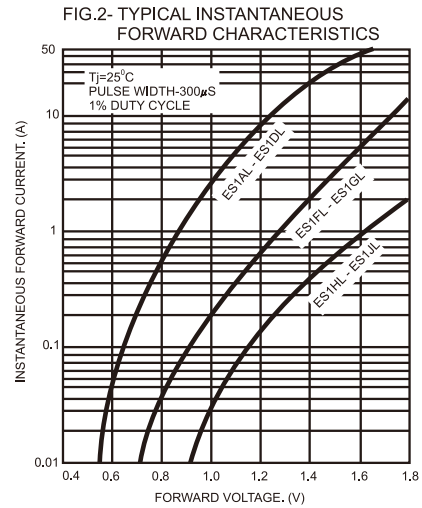
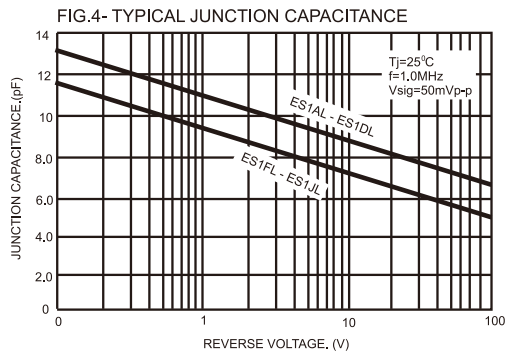
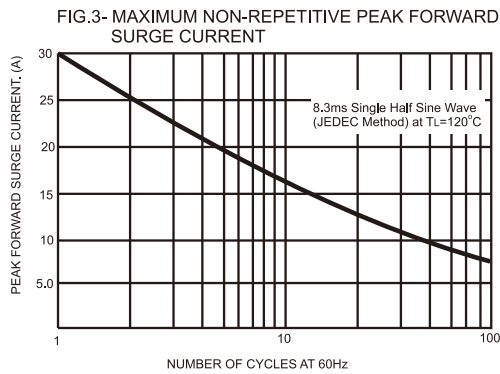
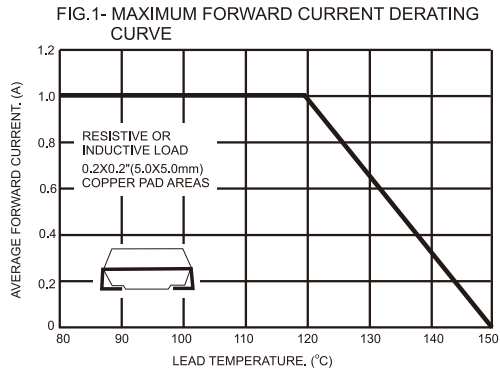


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

