



Compliance

RoHS

ES1A to ES1J
Surface Mounted Bridge Rectifier

General Description

This SMD device is for use in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application

- High Forward Surge Capability
- Low Forward Voltage Drop
- Small size package for installation

Features

- Case: SMA, molded epoxy body
- Terminal: Matte tin plated leads
- Polarity: Color band denotes cathode end

Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	ES1A	ES1B	ES1D	ES1G	ES1J	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	V
Maximum average forward output rectifier current	$I_{F(AV)}$	1.0					A
Peak forward surge current single half sine-wave superimposed on rated load	I_{FSM}	30					A
Operating Junction Temperature Range	T_J, T_{STG}	-55 to 150					$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Condition	Symbol	ES1A	ES1B	ES1D	ES1G	ES1J	Units
Maximum instantaneous forward voltage	$I_F=1.0\text{A}$	V_F	0.95			1.3	1.7	V
Maximum DC reverse current at blocking voltage	$T_A=25^\circ\text{C}$	I_R	50					μA
	$T_A=125^\circ\text{C}$		100					
Reverse Recovery Time	See note 1	t_{rr}	35					ns
Typical junction capacitance	4.0V, 1 MHz	C_J	10					pF

Thermal Characteristic ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	ES1A	ES1B	ES1D	ES1G	ES1J	Units
Typical Thermal resistance	$R_{\theta JA}$	50					$^\circ\text{C}/\text{W}$

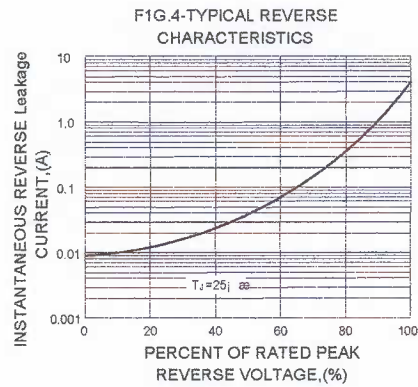
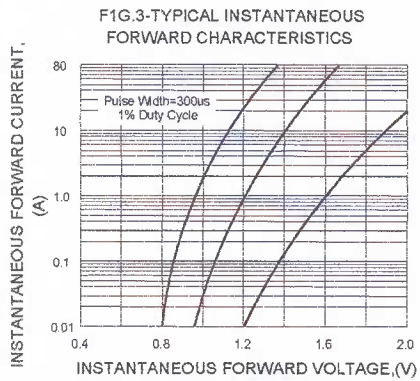
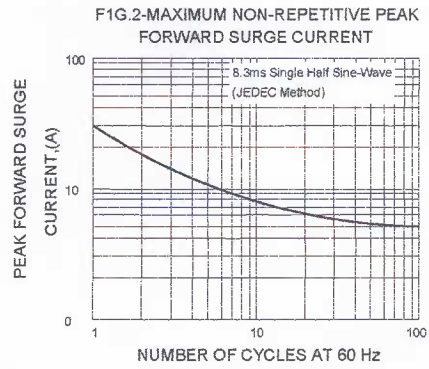
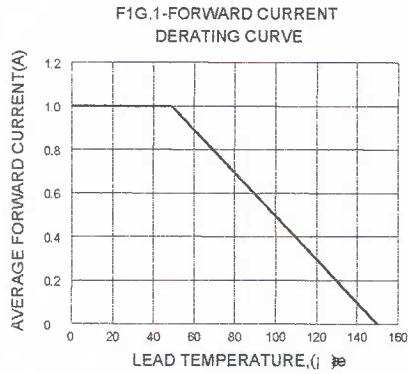
Note

1. Test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$



ES1A to ES1J

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)



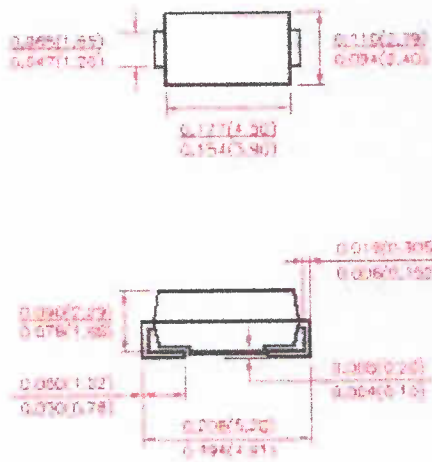


ES1A to ES1J

Package Information

SMA

DO-214AC(SMA)



Product Chip Information

Product Number	ES1J
Chip Technology	OJ Process

Ordering Information

Part No.	UNIT WEIGHT (g)	Quantity	PACKING
ES1A-ES1J	0.0305	2000 or 5000	7"/11" diameter plastic reel

NOTE:

- 1) According to the existing **RoHS** requirement, Lead found in GPP Dice and Lead in high melting Temperature type solders are specifically exempted.
- 2) After authority chop & sign, there should not be any additional changes, cancellation or correction.
- 3) Please sign & return the attached copy for us as acknowledgement of the above information.