

Features

- Low Profile Package
- Glass Passivated Chip Junction
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)

1 Amp Super Fast Recovery Rectifier 200 to 800 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 25°C/W Junction to Lead(Note 3)
- Maximum Thermal Resistance: 75°C/W Junction to Ambient(Note 3)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES1DFL	ES1D	200V	140V	200V
ES1GFL	ES1G	400V	280V	400V
ES1JFL	ES1J	600V	420V	600V
ES1KFL	ES1K	800V	560V	800V

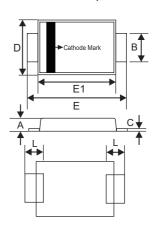
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _L =120°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ES1DFL ES1GFL ES1JFL ES1KFL	V _F	1.0V 1.3V 1.7V 1.85V	I _{FM} =1.0A; T _A =25°C;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0μA 100μA	T _A =25°C; T _A =125°C
Maximum Reverse Recovery Time	t _{rr}	35ns	I _F =0.5A; I _R =1.0A; Irr=0.25A

Note:

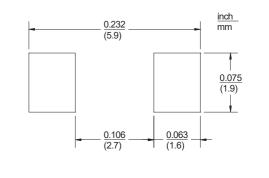
- 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.
- 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 3. Thermal Resistance From Junction to Ambient and From Junction to Lead Mounted on P.C.B. With 0.2" x 0.2" (5.0 mm x 5.0 mm) Copper Pad Areas.

DO-221AC(SMA-FL)



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	0.035	0.049	0.90	1.25		
В	0.049	0.065	1.25	1.65		
С	0.004	0.016	0.10	0.40		
D	0.089	0.116	2.25	2.95		
Е	0.173	0.220	4.40	5.60		
E1	0.126	0.181	3.20	4.60		
L	0.020	0.059	0.50	1.50		

SUGGESTED SOLDER PAD LAYOUT



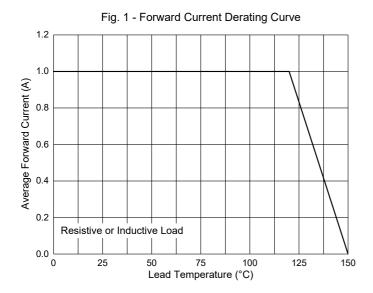


Instantaneous Forward Current (A)

0.01

0.4

Curve Characteristics



1 ES1DFL ES1GFL O.1

1.2

Instantaneous Forward Voltage (V)

ES1KFL

1.6

T_A=25°C

Fig. 3 - Typical Instantaneous Forward Characteristics

Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

35

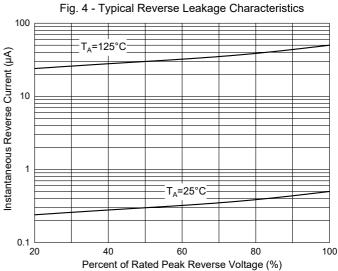
20

20

15

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz





Ordering Information

Device	Packing	
Part Number -TP	Tape&Reel: 10Kpcs/Reel	

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