

ES1KF

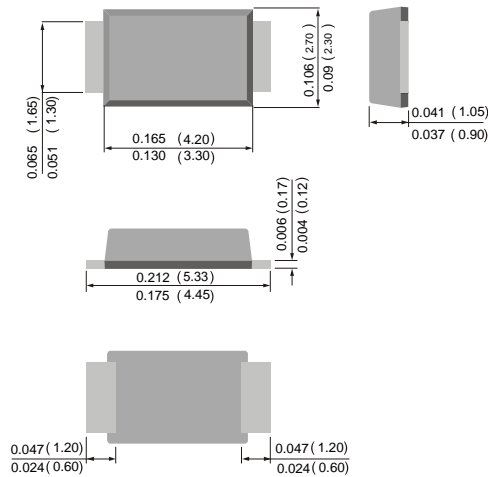
SURFACE MOUNT RECTIFIER

VOLTAGE 800 V CURRENT 1 Amperes



SMAF

Unit : inch(mm)

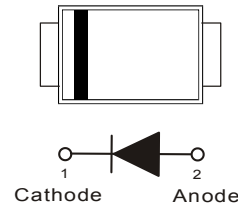


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Glass passivated junction
- Easy pick and place
- High temperature metallurgically bonden-no compression contacts as found in other diode-constructed rectifiers
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in comply with EU RoHS 2011/65/EU directives.

MECHANICAL DATA

- Case: Epoxy molded
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	ES1KF	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	800	V
RMS Voltage	V _{RMS}	560	V
DC Blocking Voltage	V _R	800	V
Average Forward Current	I _{F(AV)}	1	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	40	A
Forward Voltage at 1.0A	V _F	2.5	V
DC Reverse Current at Rated DC Blocking Voltage	I _R	5	μA
Reverse Recovery Time (Note 3)	t _{rr}	35	ns
Typical Junction capacitance	C _J	20	pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{θJL} R _{θJA}	25 150	°C / W
Operating Junction Temperature and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

NOTES :

1. Mounted on an FR4 PCB, single-sided copper, with 100cm²copper pad area.
2. Mounted on an FR4 PCB, single-sided copper, mini pad.
3. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, Recover to 0.25A.

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RATING AND CHARACTERISTIC CURVES

