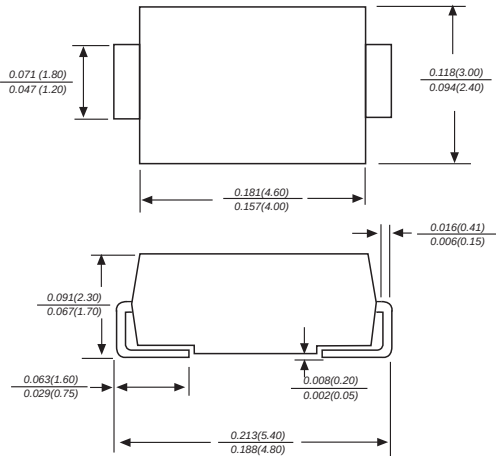


SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 50 to 800 Volts Forward Current - 1.0 Amperes

DO-214AC



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Super fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.058 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	ES1K	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	800	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	560	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	800	VOLTS
Maximum average forward rectified current at T _L =55°C	I _(AV)	1.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0								Amps
Maximum instantaneous forward voltage at 2.0A	V _F	0.95				1.3		1.7		Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 200.0								uA
Maximum reverse recovery time (NOTE 1)	t _{rr}	35							65	ns
Typical junction capacitance (NOTE 2)	C _J	60.0								pF
Typical thermal resistance (NOTE 3)	R _{qJA}	40.0								°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150								°C

Note: 1. Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES ES1A THRU ES1K

