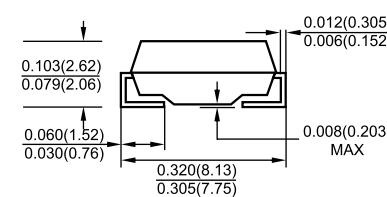
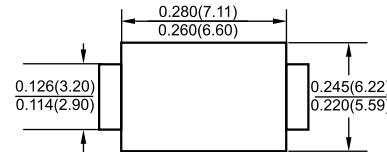


## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal-Silicon Junction
- For surface mount applications
- Guard ring for over voltage protection
- High forward surge current capability
- Super Low forward voltage
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-750 method 2026
- Mounting position: Surface Mounted
- Weight: 0.007 ounce, 0.25 grams



Dimensions in inches and (millimeters)

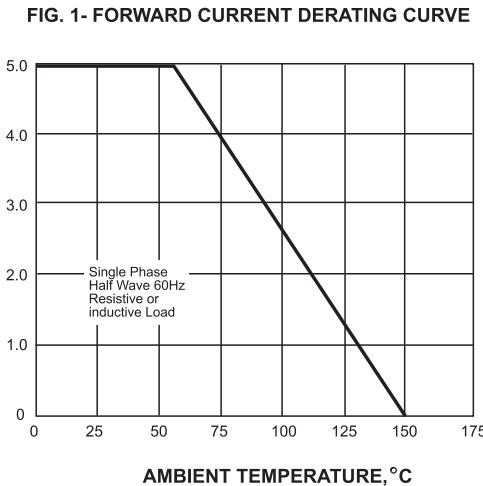
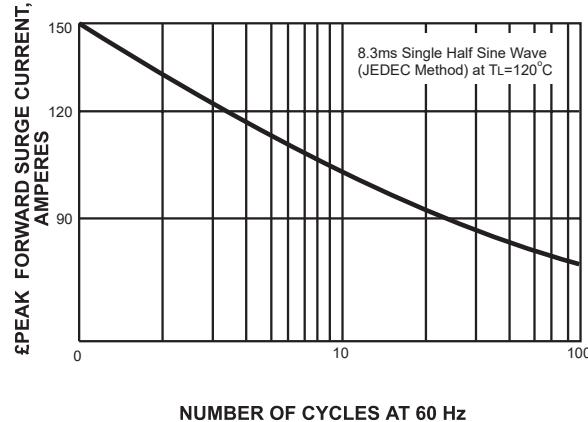
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

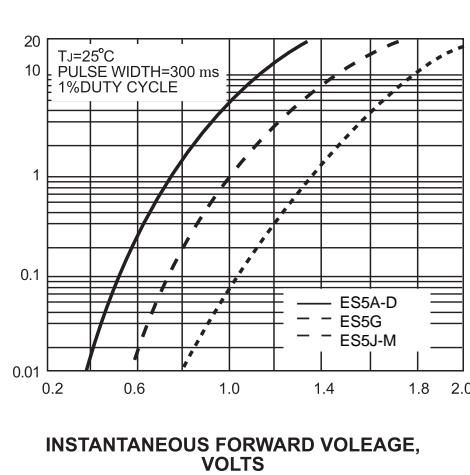
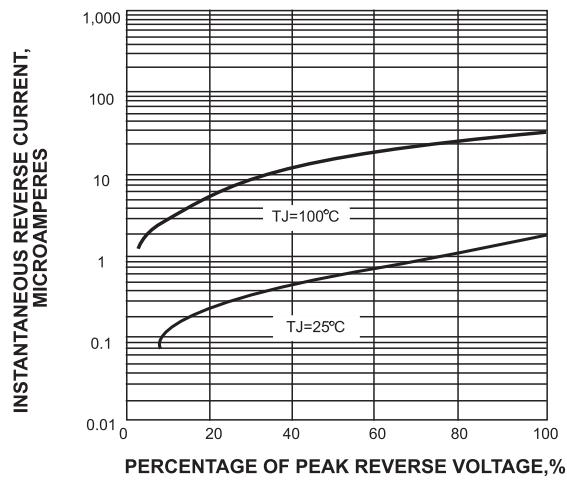
Parameter	Symbol	ES5AC	ES5BC	ES5DC	ES5GC	ES5JC	ES5KC	ES5MC	
Marking code		ES5A	ES5B	ES5D	ES5G	ES5J	ES5K	ES5M	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	720	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I <sub>(AV)</sub>					5.0			Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>					150			Amps
Maximum Instantaneous Forward Voltage at 5.0A (Note 1)	V <sub>F</sub>		0.95		1.25		1.68		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	I <sub>R</sub>				5				u A
					100				
Maximum reverse recovery time (Note 2)	T <sub>rr</sub>			35		75			ns
Operating Temperature Range	T <sub>J</sub>			-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>			-55 to +150					°C

### Notes:

- Pulse test: 300μs pulse width, 1% duty cycle
- Test conditions : IF=0.5A, IR=1.0A, IRR=0.25A

AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**


INSTANTANEOUS FORWARD CURRENT, AMPERES


**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**


JUNCTION CAPACITANCE, pF

