

Reverse Voltage: 100 to 600 V
Forward Current: 1 A

Surface Mount
Super Fast Rectifiers

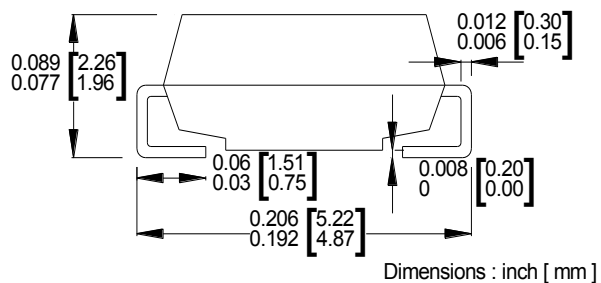
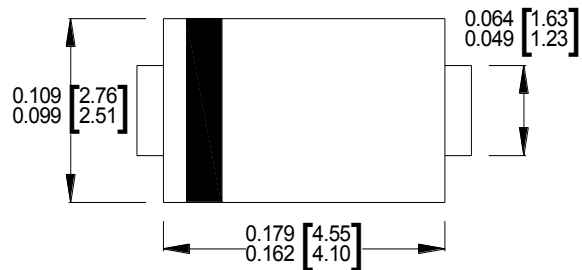
Features

- Glass passivated chip
- Low forward voltage
- High current capability
- High reliability
- High surge current capability
- High speed switching
- RoHS compliant

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SMA / DO-214AC



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

Parameter	Symbol	ES1B	ES1D	ES1G	ES1J	Unit
Maximum repetitive peak reverse voltage @ $I_T = 5\mu\text{A}$	V_B	100	200	400	600	V
Maximum RMS voltage	V_R	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	V
Maximum average forward rectified current @ $T_A = 25^\circ\text{C}$	I_F	1.0				A
Maximum instantaneous forward voltage at specified current	V_F	0.95		1.25	1.5	V
Maximum DC reverse current	I_R	5.0				μA
Maximum reverse recovery	T_{rr}	35			50	ns
Operating and storage temperature range	T_J, T_{STG}	-55 ~ 150				$^\circ\text{C}$

Note:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$ (RG1 circuit)

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

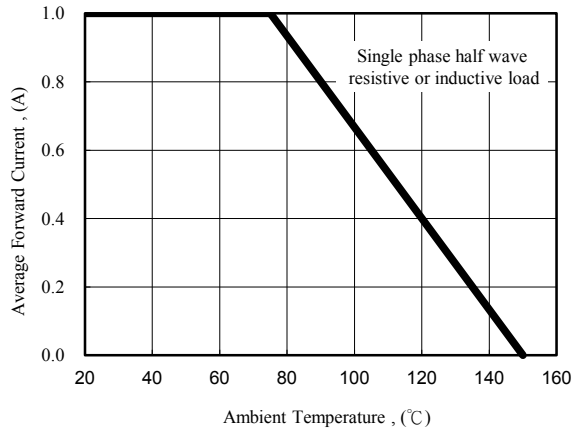


Fig. 1 - Forward Current Derating Curve

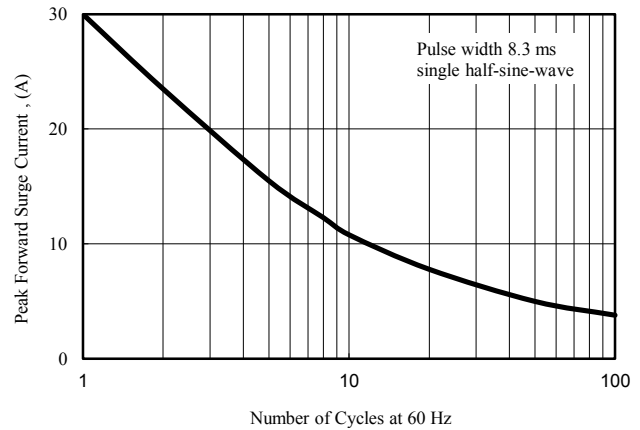


Fig. 2 - Peak Forward Surge Current

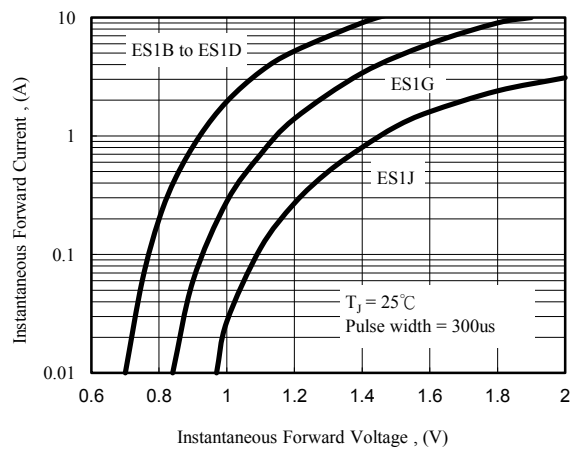


Fig. 3 - Typical Forward Characteristics

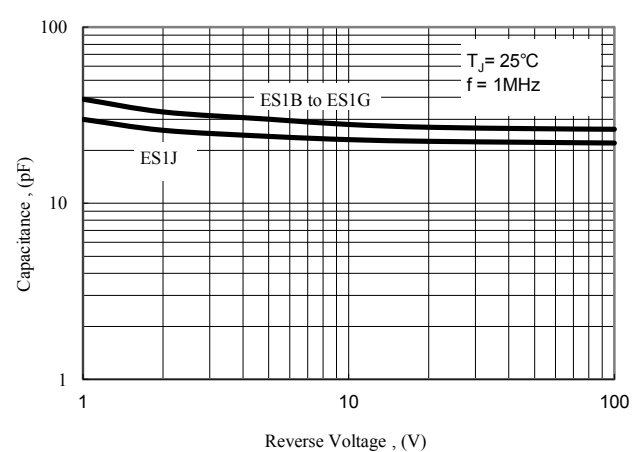


Fig. 4 - Typical Junction Capacitance