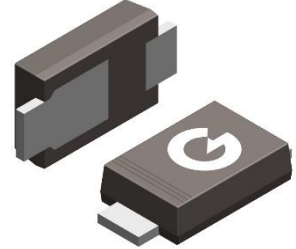


Fast Recovery Rectifier

F10JHE

Features

- Low forward voltage drop
- High forward surge current capability
- Low-profile SMD ideal for automated manufacturing
- RoHS compliant with Halogen-free



Mechanical Data

- Case: SOD-323HE molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	F10JHE	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
RMS Reverse Voltage	V _{RMS}	420	V
DC Blocking Voltage	V _{DC}	600	V
Average Forward Output Current	I _{F_AV}	1.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I _{FSM}	10	A

Thermal Characteristics

Parameter	Symbol	F10JHE	Unit
Typical Thermal Resistance *1	R _{θJA}	88	°C/W
	R _{θJC}	35	
	R _{θJL}	22	
Operating Junction Temperature Range	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Note *1: Device mounted on p.c.b. with 2.2cm x 1.7 cm x 1mm copper pad area

Fast Recovery Rectifier

F10JHE

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Typ.	Max.	Unit
Instantaneous Forward Voltage	V_F	$I_F=0.5\text{A}$	-	1.3	V
Reverse Current	I_R	Rated V_R	@ $T_A=25^\circ\text{C}$	5	μA
			@ $T_A=125^\circ\text{C}$	200	
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}, I_{RM}=1\text{A}, I_{R(REC)}=0.25\text{A}$	-	250	ns

Fast Recovery Rectifier

F10JHE

Ratings and Characteristics Curves (@T_A = 25°C unless otherwise noted)

Fig. 1 Forward Current Derating Curve

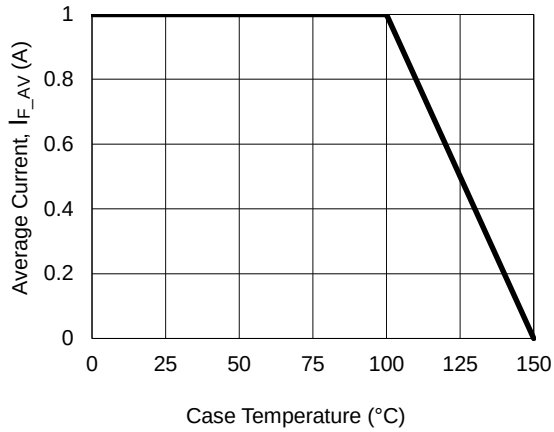


Fig. 2 Surge Current Derating Curve

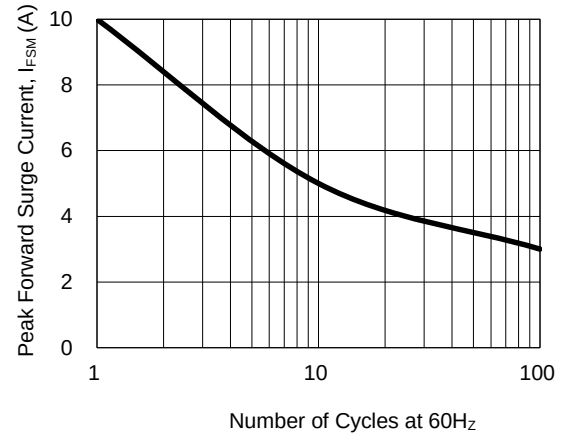


Fig. 3 Typical Forward Voltage Characteristics

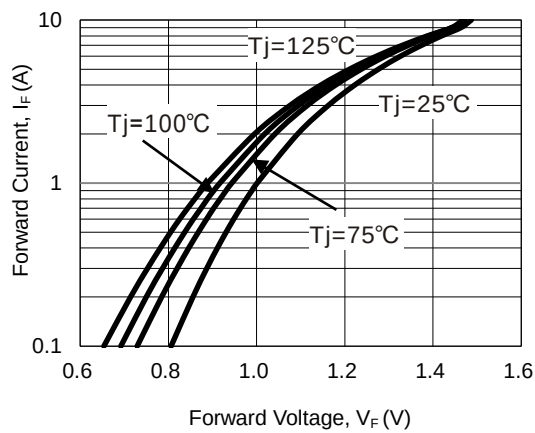
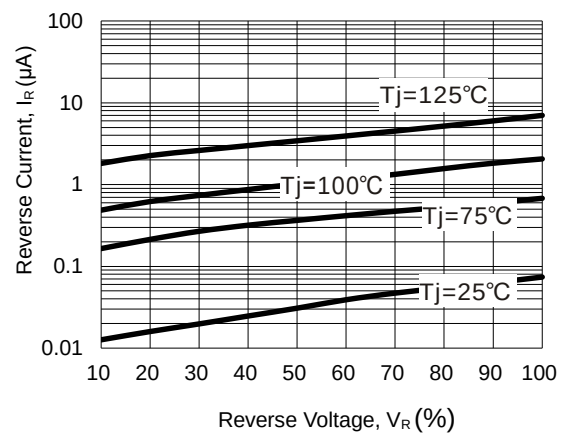


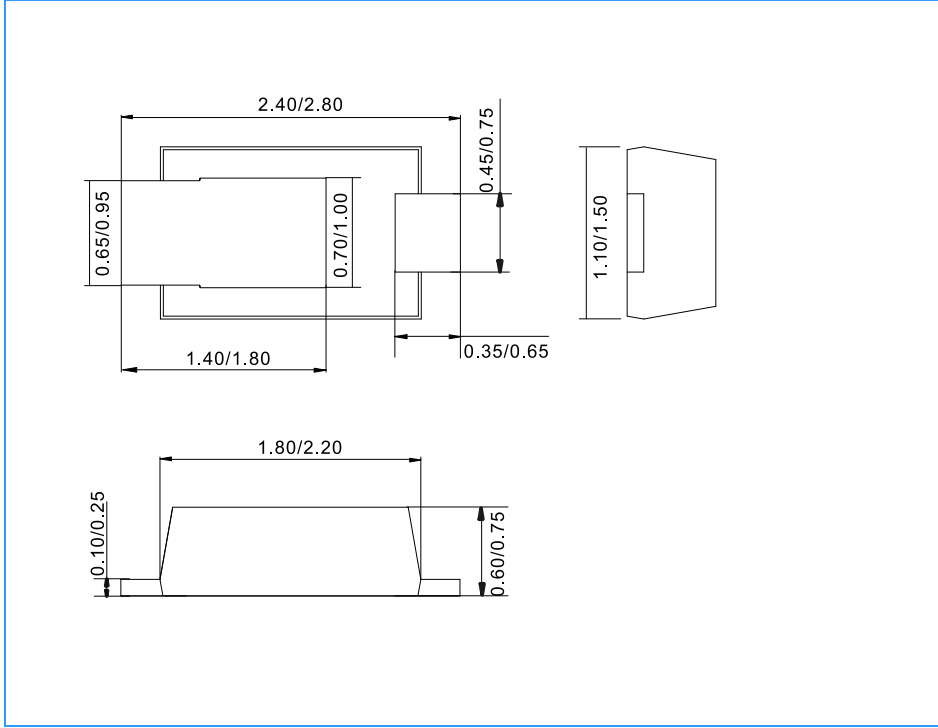
Fig. 4 Typical Reverse Characteristics



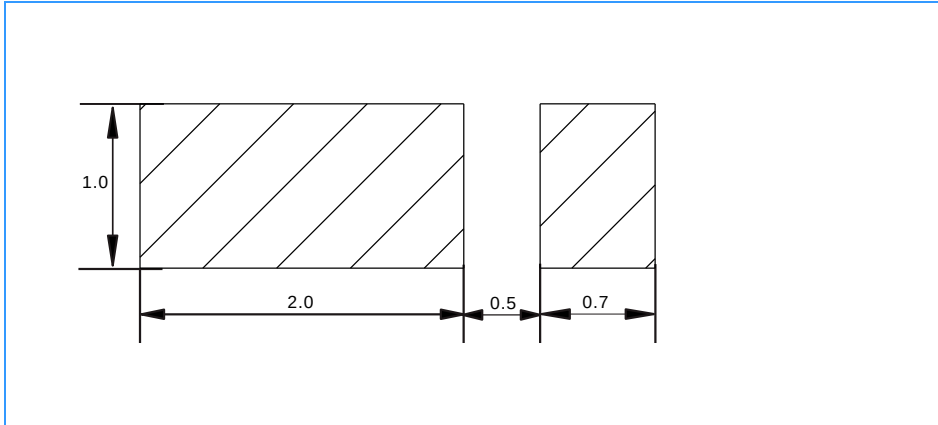
Fast Recovery Rectifier

F10JHE

Package Outline Dimensions (Unit: mm)



Mounting Pad Layout (Unit: mm)



Ordering Information

Part Number	Marking	Package
F10JHE	F1J	SOD-323HE