FUXINSEMI
INNOVATOR IN SEMICONDUCTOR

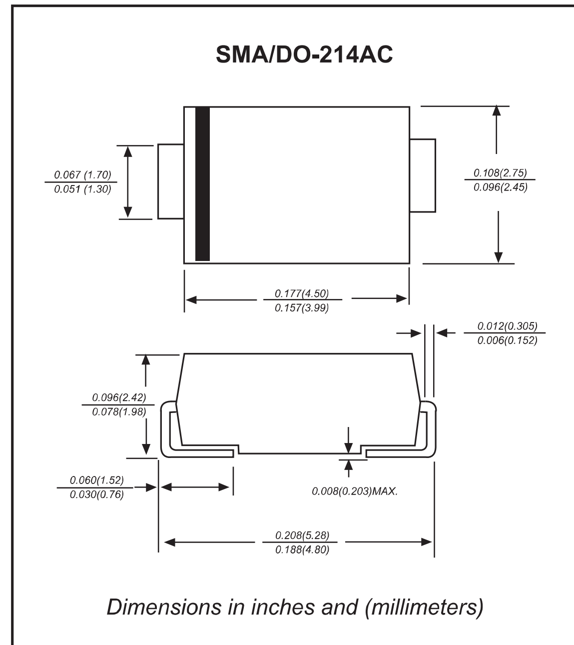
B350AE / B360AE

Schottky Barrier Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Compliant to RoHS 2.0
- Compliant to Halogen-free

Package outline



Dimensions in inches and (millimeters)

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

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

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

Characteristic	Symbol	B350AE	B360AE	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	50	60	V
Average Rectified Output Current	I_O	3		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	80		A

Thermal Characteristics

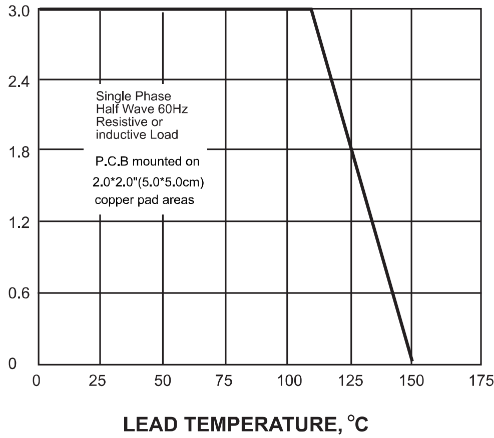
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	60	°C/W
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	30	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

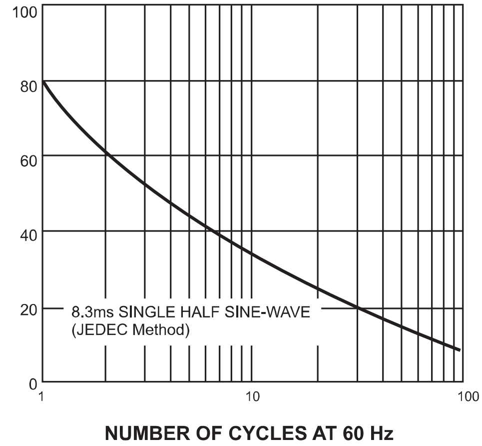
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

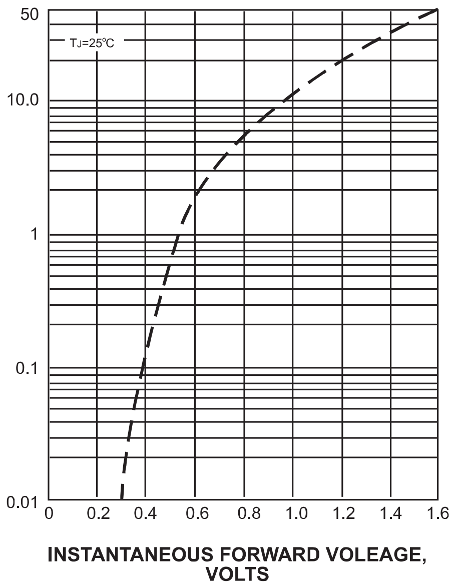
Characteristic		Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop		V_F	— —	0.55 0.52	0.65 —	V	I_F = 3A, T_J = +25°C I_F = 3A, T_J = +125°C
Leakage Current (Note 2)	B350AE B360AE	I_R	— — —	— — —	0.1 0.1 10	mA	V_R = 50V, T_J = +25°C V_R = 60V, T_J = +25°C V_R = 60V, T_J = +125°C
Typical Capacitance		C_T	—	125	—	pF	V_R = 4.0V, f = 1MHz

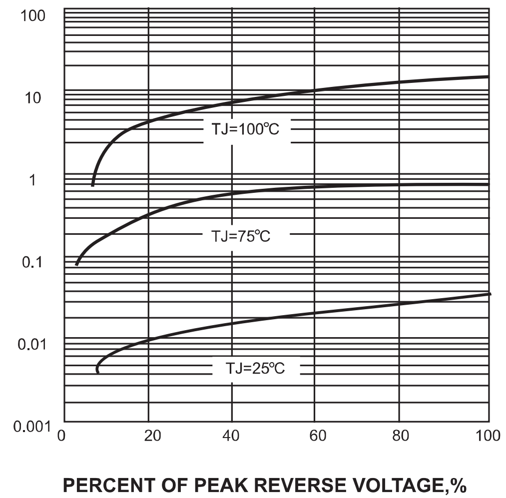
Notes: 1. Device mounted on FR-4 substate, 1"*1", 2oz, single-sided, PC boards with 0.56"*0.73" copper pad.
2. Short duration pulse test used to minimize self-heating effect.

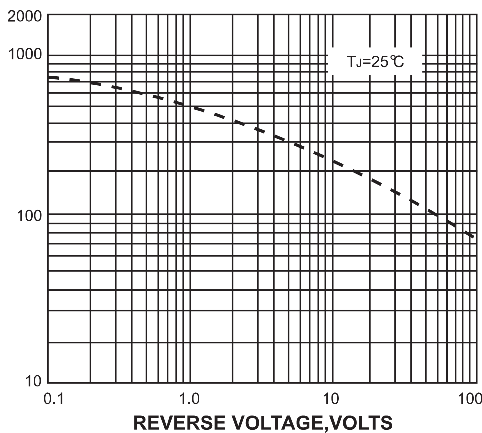
Rating and characteristic curves

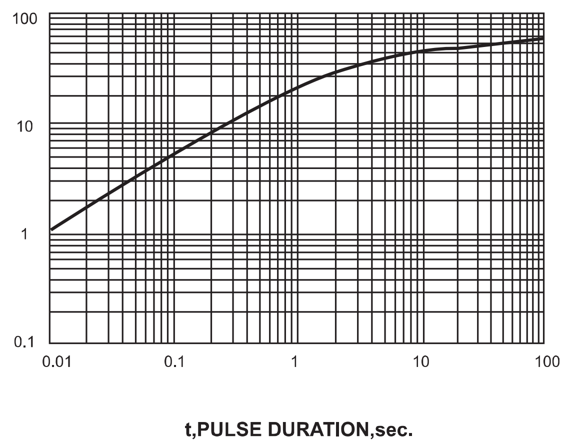












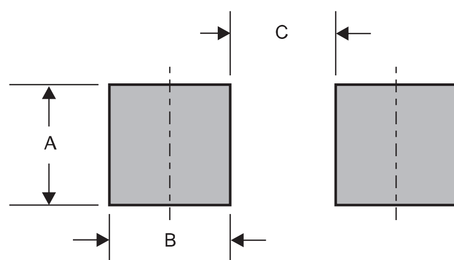
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode	1 2	1 2

Marking

Type number	Marking code	Example
B350AE B360AE	B360AE	B360AE Marking code

Suggested solder pad layout

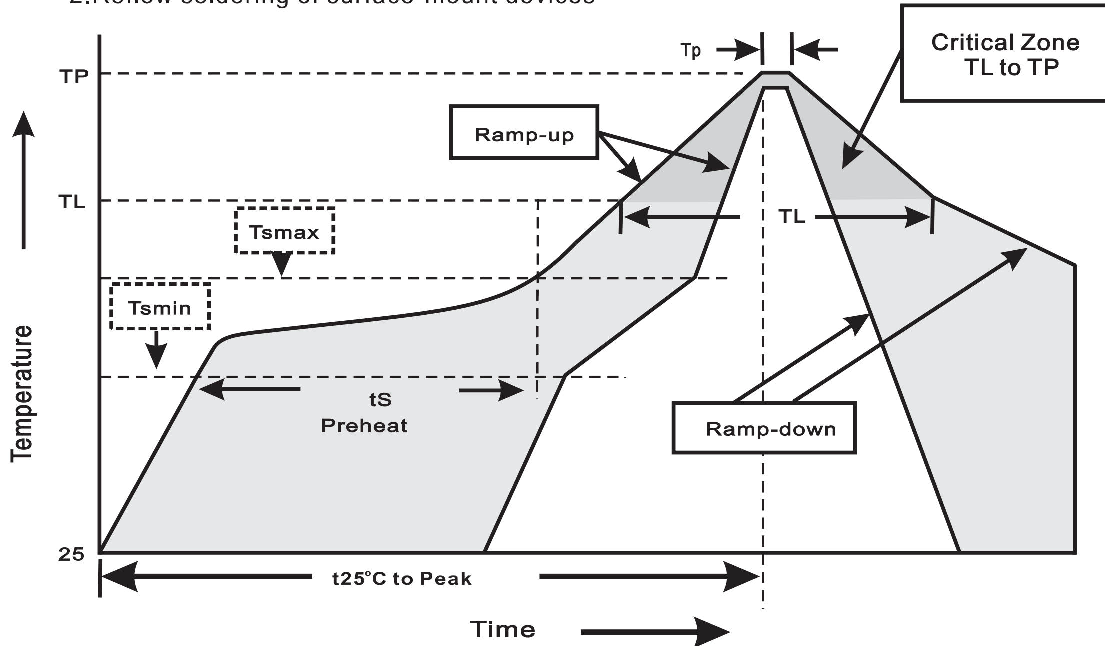


Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMA	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)

Suggested thermal profiles for soldering processes

1.Storage environment: Temperature=5°C~40°C Humidity=55%±25%
2.Reflow soldering of surface-mount devices



3.Reflow soldering

Profile Feature	Soldering Condition
Average ramp-up rate(T_L to T_P)	<3°C/sec
Preheat -Temperature Min(Tsmin) -Temperature Max(Tsmax) -Time(min to max)(t_s)	150°C 200°C 60~120sec
Tsmax to T_L -Ramp-upRate	<3°C/sec
Time maintained above: -Temperature(T_L) -Time(t_L)	217°C 60~260sec
Peak Temperature(T_P)	255°C-0/+5°C
Time within 5°C of actual Peak Temperature(t_P)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes