

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

### Mechanical Data

**Case :** Molded plastic body

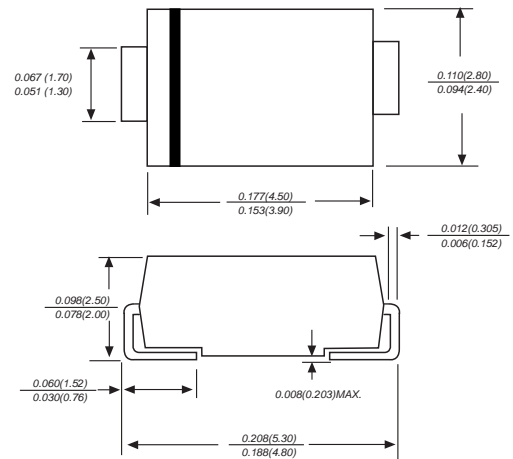
**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0023 ounce, 0.07 grams

### DO-214AC/SMA



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 current derate by 20%.

Parameter	SYMBOLS	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50.0							A
Maximum instantaneous forward voltage at 2.0A	$V_F$	1.30							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Maximum reverse recovery time(Note 1)	$T_{rr}$	150			250		500		ns
Typical junction capacitance (Note2)	$C_J$	50.0							pF
Typical thermal resistance	$R_{qJA}$	80.0							$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

**Note:** 1.Reverse recovery time test condition:  $I_F=0.5\text{A}$   $I_R=1.0\text{A}$   $I_{rr}=0.25\text{A}$

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

### Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

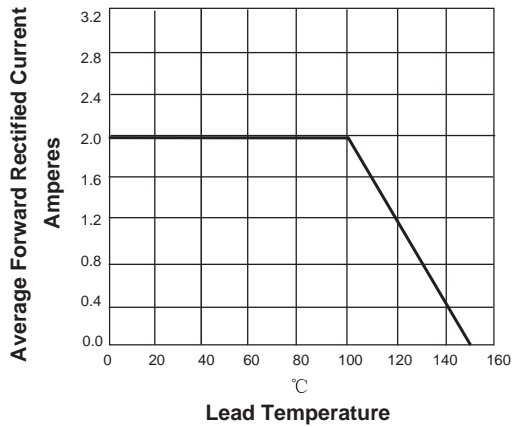


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

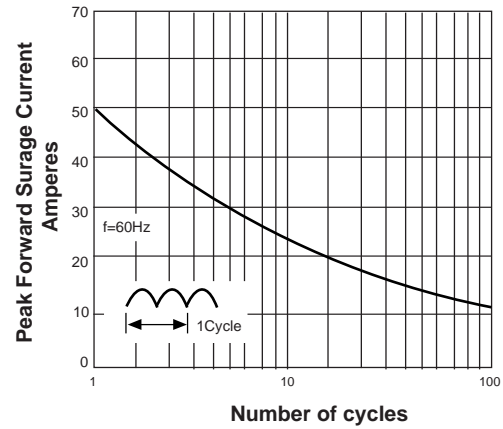


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

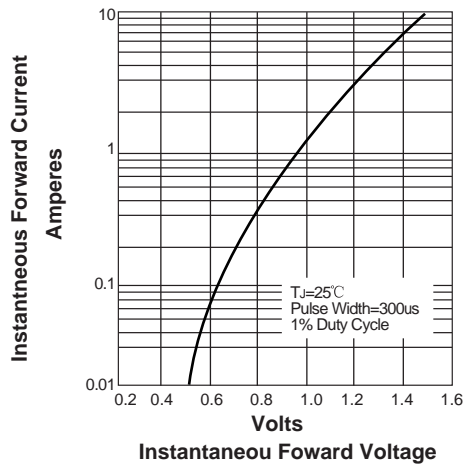
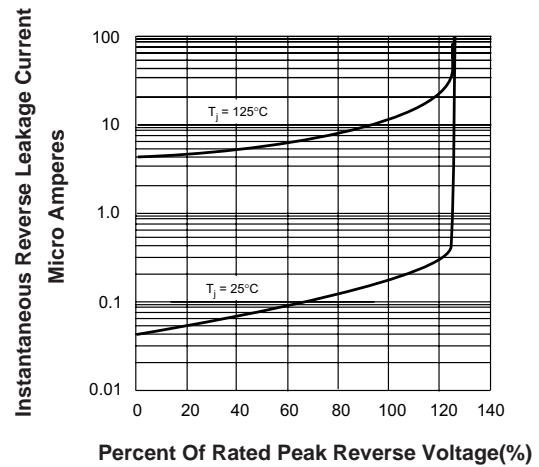
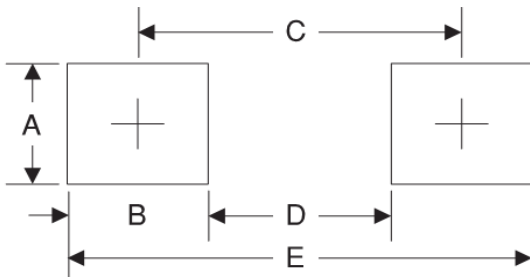


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

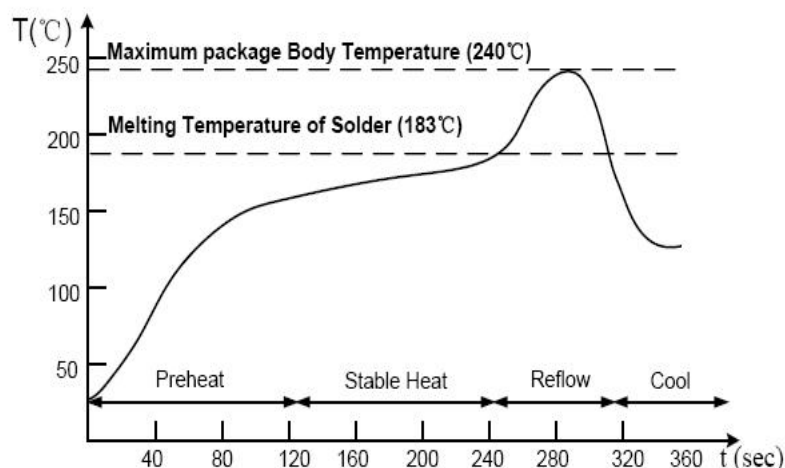


### Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215

#### Suggested Soldering Temperature Profile

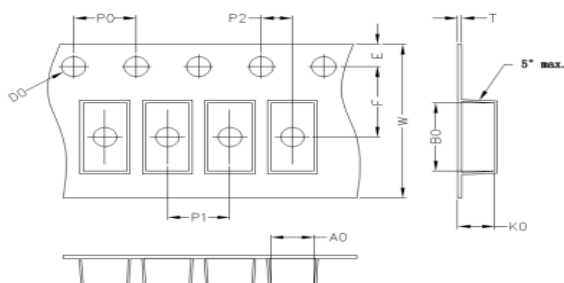


#### Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

#### Package Information

##### Carrier Dimension(mm)



A0	B0	K0	D0	E	F
2.80	5.30	2.36	1.55	1.75	5.50
P0	P1	P2	T	W	Tolerance
4.0	4.0	2.0	0.25	12	0.1

##### Package Specifications

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SMA	11'	278	5	285	10	355*310*310	80
	13'	330	7.5	340	15	360*360*360	120