

**SSCD304SH AND SSCD306SH**

● **FEATURES**

- \* Halogen-free type
- \* Compliance to RoHS product
- \* Lead less chip form, no lead damage
- \* Low power loss, High efficiency
- \* High current capability, low VF, low IR
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **APPLICATION**

- \* Switching mode power supply applications
- \* Portable equipment battery applications
- \* General rectification
- \* DC / DC Converter
- \* Telecommunication

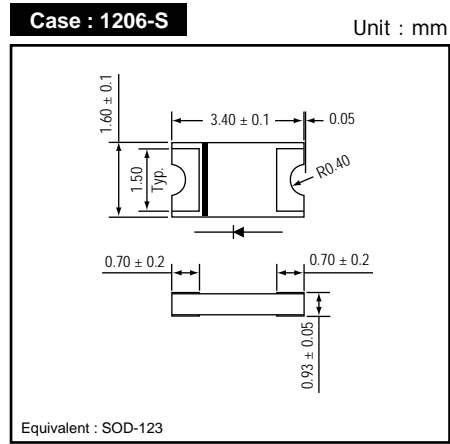
● **MECHANICAL DATA**

**Case :** Packed with FRP substrate and epoxy underfilled  
**Terminals :** Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.  
**Polarity :** Laser Cathode band marking  
**Weight :** 0.012 gram

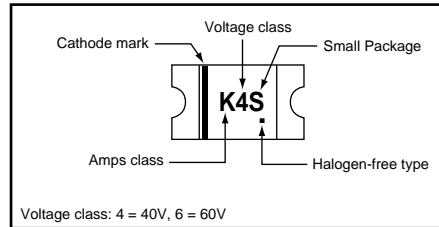
● **PACKING**

- \* 3,000 pieces per 7" (178mm ± 2mm) reel
- \* 4 reels per box
- \* 6 boxes per carton

● **OUTLINE DIMENSIONS**



● **MARKING**



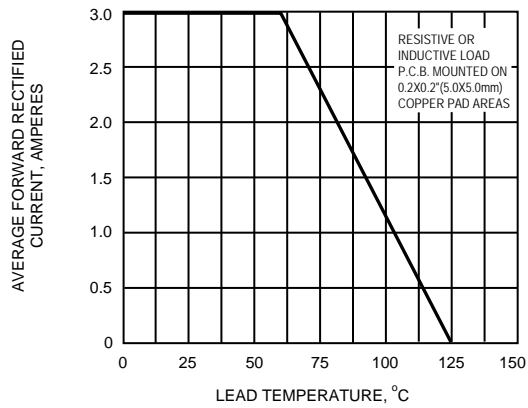
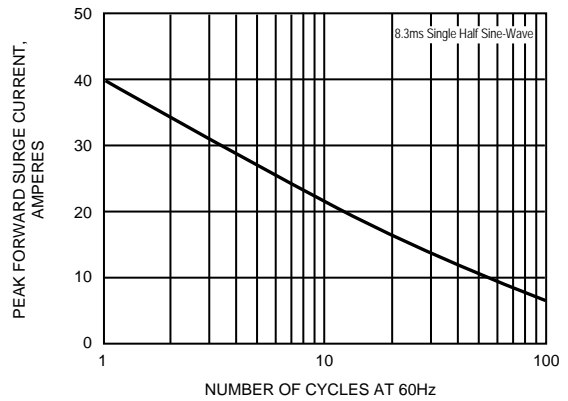
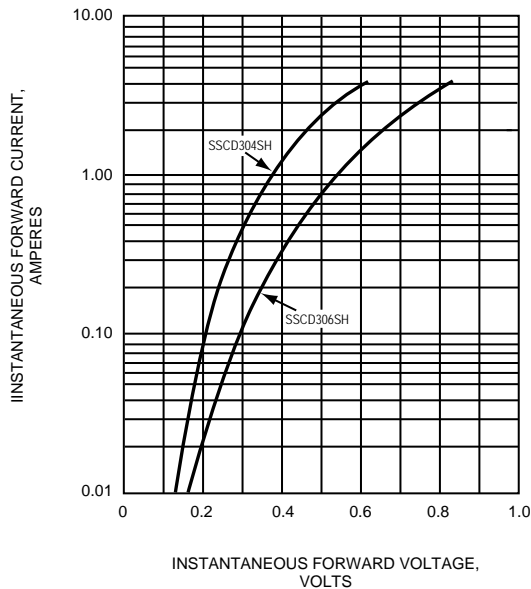
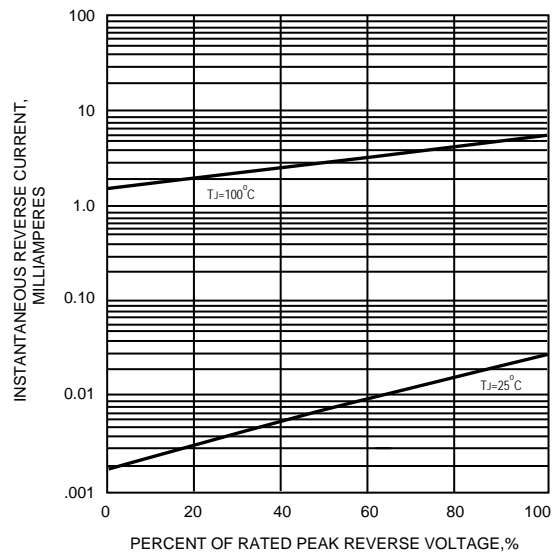
**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	Rating		Unit
			SSCD304SH	SSCD306SH	
Repetitive peak reverse voltage	VRRM		40	60	V
Average forward current	IF(AV)		3.0		A
Peak forward surge current	IFSM	8.3ms single half sine-wave	40		A
Operating junction temperature Range	Tj		-55 to +125		°C
Storage temperature Range	TSTG		-55 to +150		°C

**Electrical characteristics (Ta = 25 °C)**

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	VF	IF = 3.0A	SSCD304SH	-	0.53	0.55	V
			SSCD306SH	-	0.75	0.80	
Repetitive peak reverse current (NOTE 1)	IRRM	VR = Max. VRRM, Ta = 25 °C		-	0.03	0.20	mA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	110	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)		-	88	-	°C/W
	Rth(JL)	Junction to lead (NOTE 2)		-	28	-	

NOTES : (1) Pulse test width PW=300usec, 1% duty cycle.  
 (2) Mounted on P.C. board with 0.2 x 0.2"(5.0 x 5.0mm) copper pad areas.

**FIG.1 - FORWARD CURRENT DERATING CURVE**

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

**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

**FIG.5 - TYPICAL JUNCTION CAPACITANCE**
