

**SSCD052H THRU SSCD056H**

● **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
- \* 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

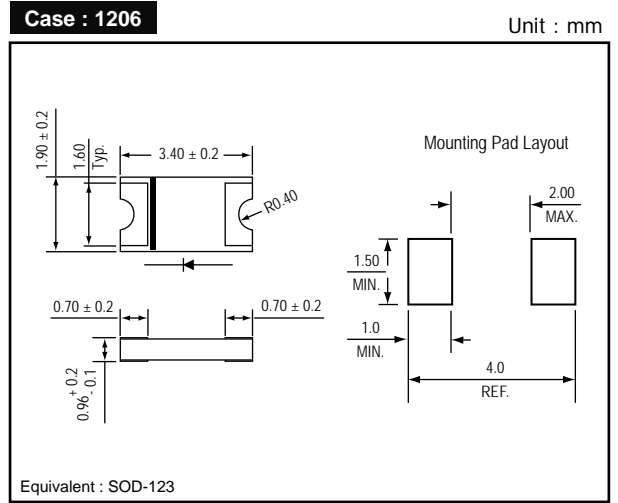
● **MECHANICAL DATA**

**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

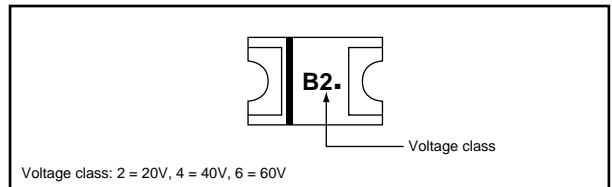
● **PACKING**

- \* 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
			SSCD052H	SSCD054H	SSCD056H	
Repetitive peak reverse voltage	VRRM		20	40	60	V
Average forward current	IF(AV)		0.5			A
Peak forward surge current	IFSM	8.3ms single half sine-wave	15			A
Junction temperature	Tj		125			°C
Operating temperature range	Topr		-40 to +125		-55 to +150	
Storage temperature range	TSTG		-55 to +125		-55 to +150	

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

ITEM	Symbol	Conditions	Type	Typ.	Max.	Unit
Forward voltage (NOTE 1)	VF	IF = 0.1A	SSCD052H	0.32	-	V
		IF = 0.3A		0.36	-	
		IF = 0.5A		0.40	0.42	
		IF = 0.1A	SSCD054H	0.35	-	
		IF = 0.3A		0.40	-	
		IF = 0.5A		0.45	0.48	
IF = 0.1A	SSCD056H	0.40	-			
IF = 0.3A		0.45	-			
IF = 0.5A		0.48	0.55			
Repetitive peak reverse current (NOTE 1)	IRRM	VR = Max. VRRM , Ta = 25 °C		10	50	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		120	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)		88	-	°C/W
	Rth(JL)	Junction to lead (NOTE 2)		28	-	°C/W

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.  
 (2) Mounted on P.C. board with 0.2 x 0.2\*(5.0 x5.0mm) copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

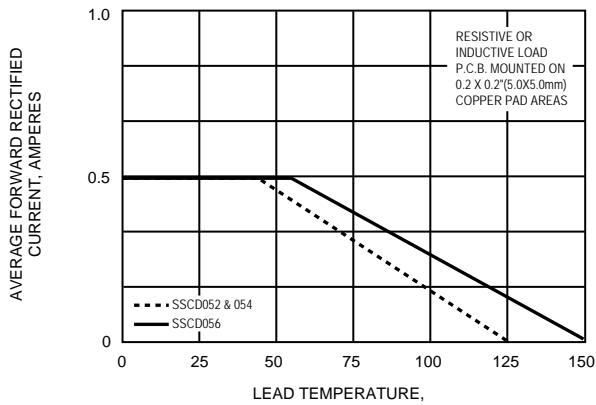


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

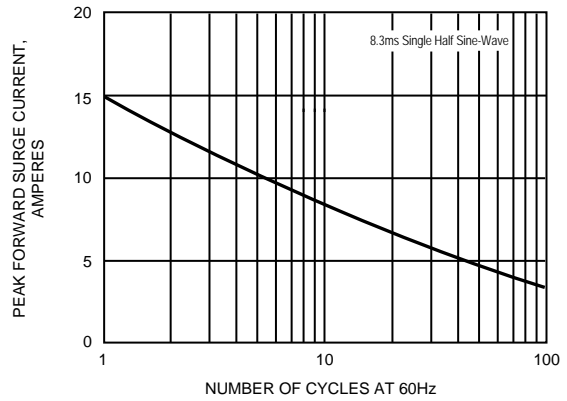


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

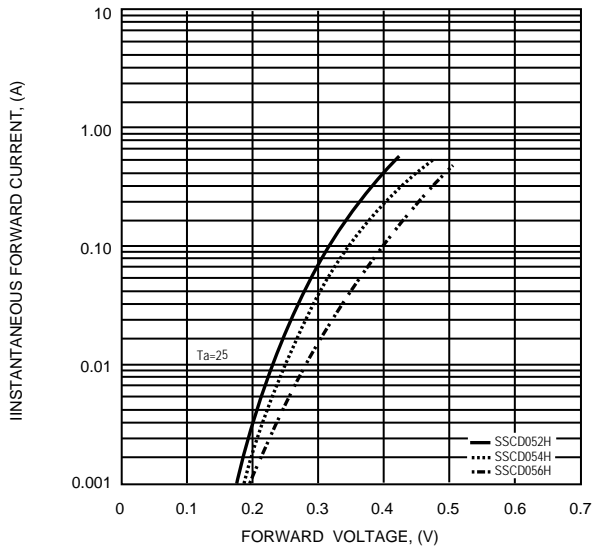


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

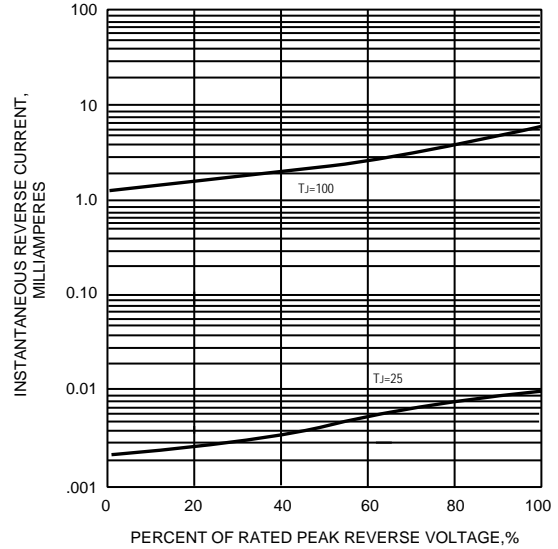


FIG.5 - TYPICAL JUNCTION CAPACITANCE

