

## SCD115H AND SCD120H

### ● 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
- \* High frequency 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 :** 0.02 gram

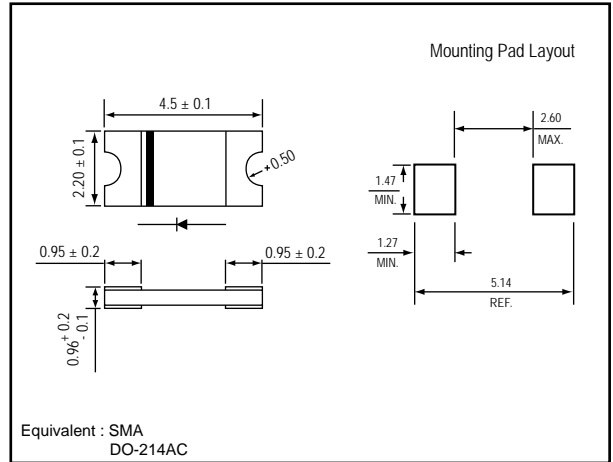
### ● PACKING

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

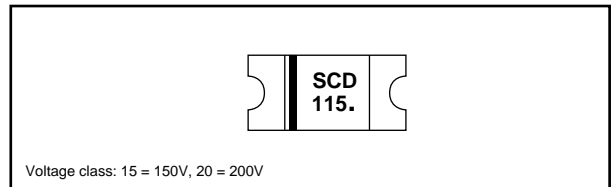
### ● OUTLINE DIMENSIONS

Case : 2010

Unit : mm



### ● MARKING



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

ITEM	Symbol	Conditions	Rating		Unit
			SCD115H	SCD120H	
Repetitive peak reverse voltage	VRRM		150	200	V
Average forward current	IF(AV)		1.0		A
Peak forward surge current	IFSM	8.3ms single half sine-wave	30		A
Operating junction temperature Range	Tj		-55 to +150		°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 = 1.0A	SCD115H	-	0.83	0.88	V
		IF = 1.0A	SCD120H	-	0.86	0.90	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	1.00	50	uA
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	-	°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

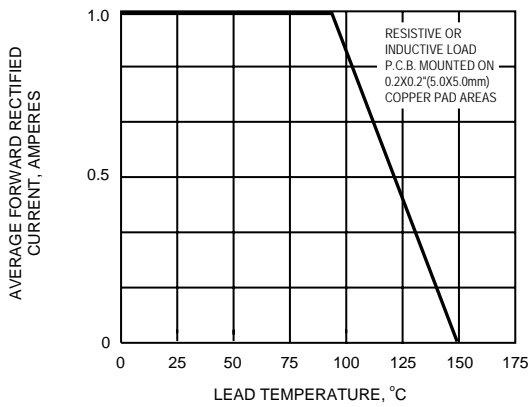


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

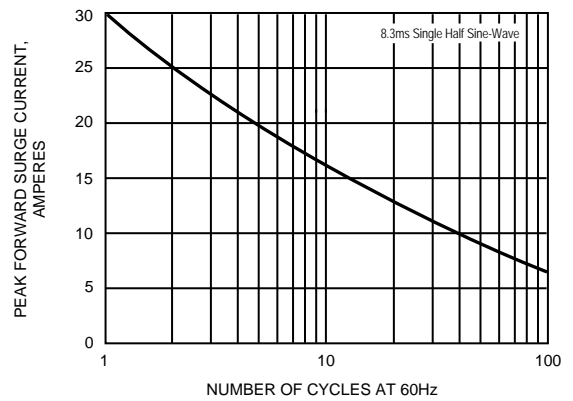


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

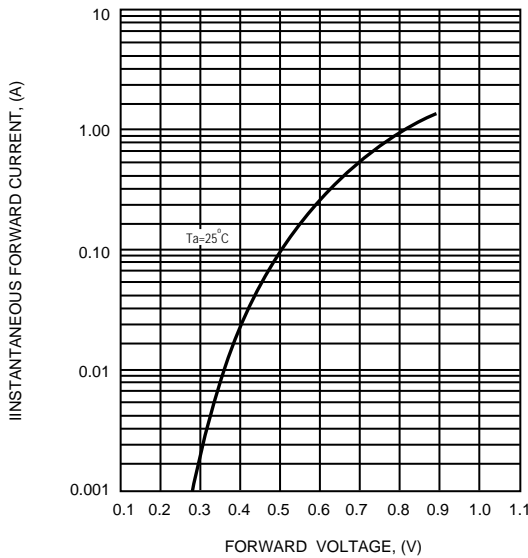


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

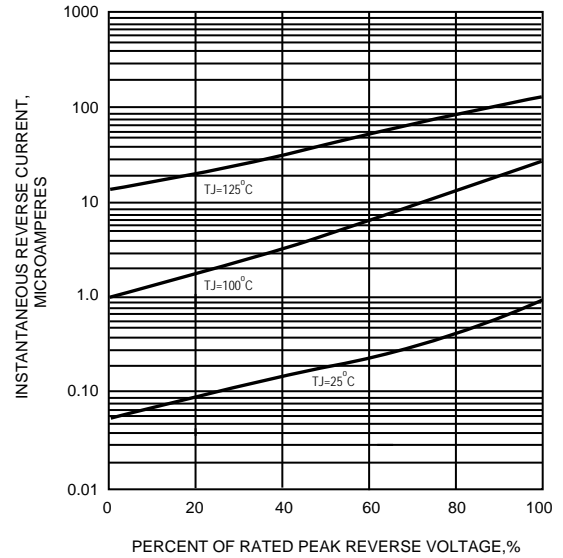


FIG.5 - TYPICAL JUNCTION CAPACITANCE

