

WSCD54H
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

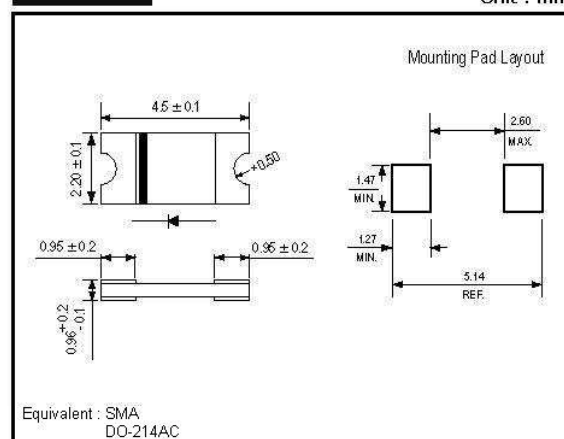
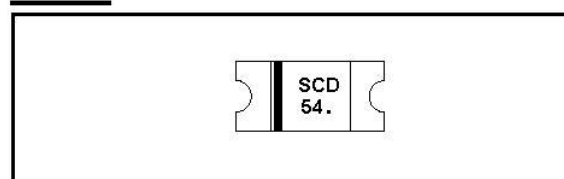
PACKING

- * 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)

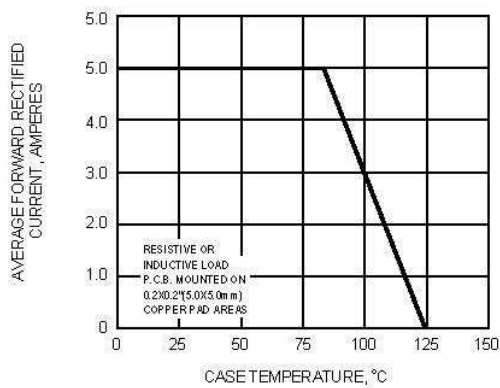
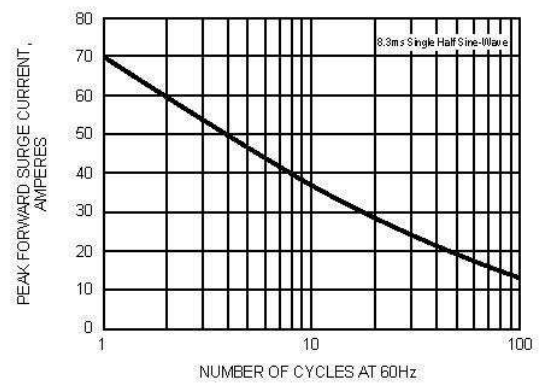
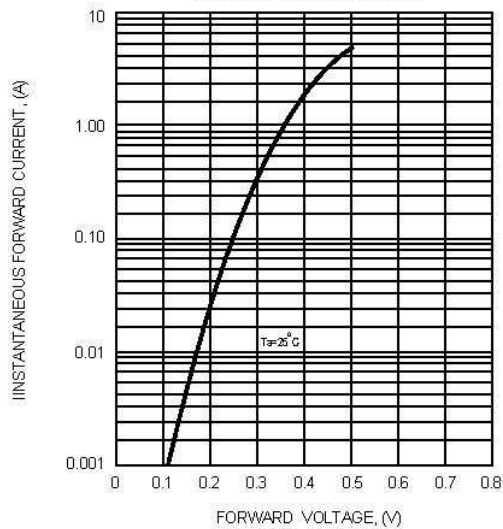
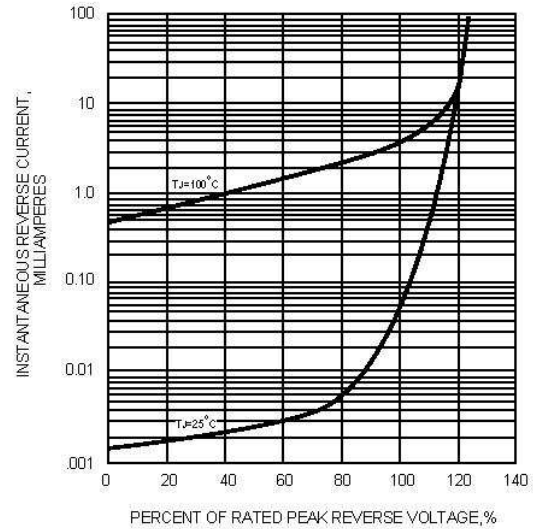
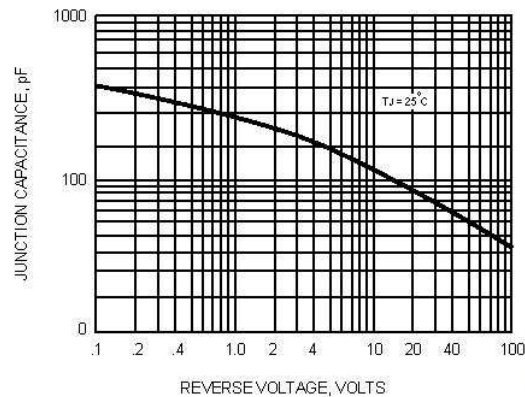
ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}		40	V
Average forward current	I _{F(AV)}	T _C = 83 °C	5	A
Peak forward surge current	I _{FSM}	8.3ms single half sine-wave	70	A
Operating junction temperature Range	T _J		125	°C
Storage temperature Range	T _{STG}		-55 to +150	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	V _F	I _F = 3.0A I _F = 5.0A	-	0.42 0.48	- 0.54	V
Repetitive peak reverse current	I _{RRM}	V _R = Max. V _{RRM} , Ta = 25 °C	-	0.05	0.20	mA
Junction capacitance	C _J	V _R = 4V, f = 1.0 MHz	-	210	-	pF
Thermal resistance	R _{th(JA)}	Junction to ambient (NOTE 2)	-	55	-	°C/W
	R _{th(JL)}	Junction to lead (NOTE 2)	-	17	-	°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 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

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