

WSCD545H
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

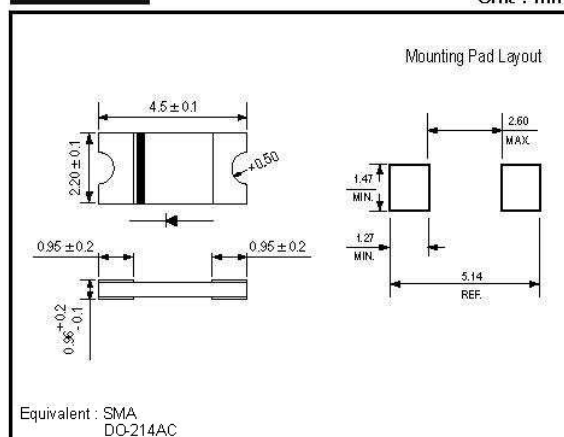
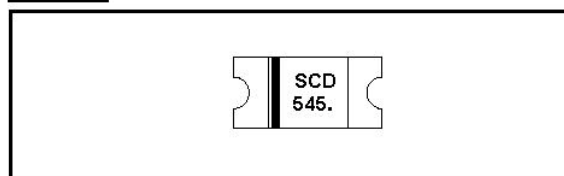
PACKING

- * 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)

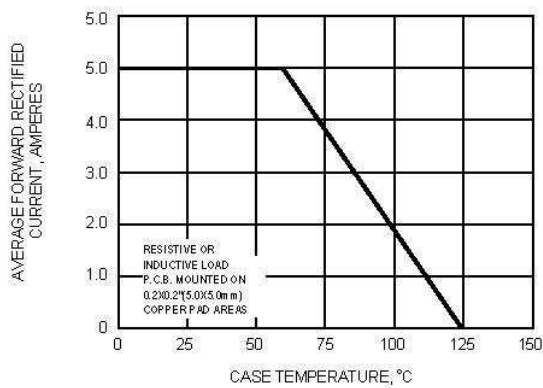
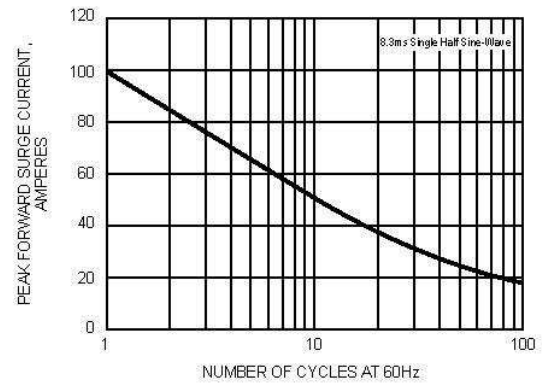
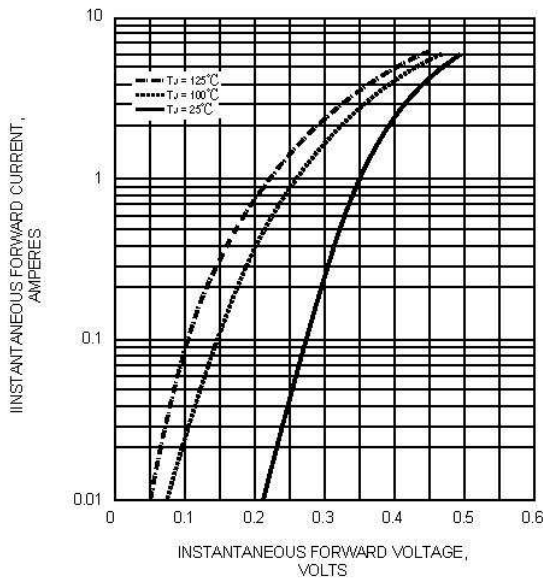
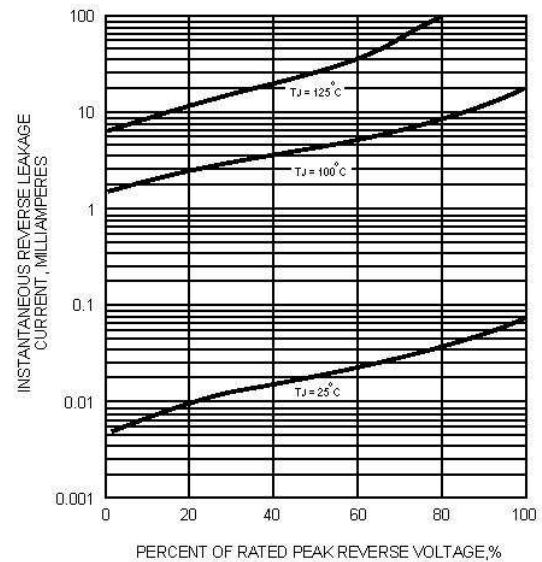
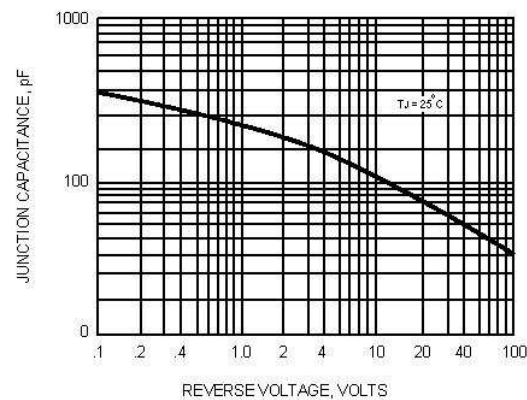
ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		45	V
Average forward current	IF(AV)	Tc = 83 °C	5	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	100	A
Operating junction temperature Range	Tj		125	°C
Storage temperature Range	TSTG		-55 to +150	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	VF	IF = 3.0A IF = 5.0A	- -	0.42 0.48	- 0.54	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C	-	0.05	0.20	mA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	210	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)	-	109	-	°C/W
	Rth(JL)	Junction to case (NOTE 2)	-	29	-	°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

MAXMEGA

DISTRIBUTED BY: MAXMEGA ELECTRONICS PTE LTD
 83, HILLVIEW AVE #09-19
 LAM SOON INDUSTRIAL BUILDING
 SINGAPORE 669589
 TEL: +65 8769 1118
 FAX: +65 6769 2221
 EMAIL: maxsales@maxmega.com
 WEBSITE: www.maxmega.com