

USCD022H THRU USCD024H
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 : 0.003 gram

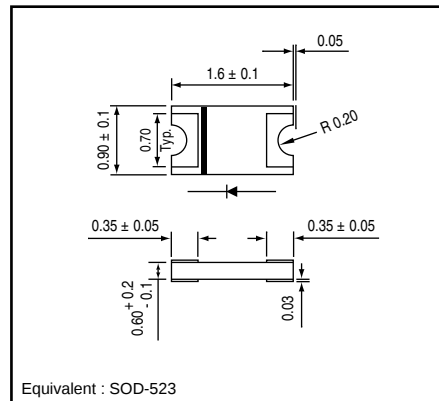
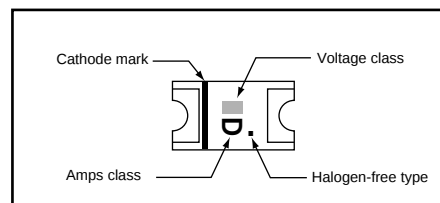
PACKING

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

OUTLINE DIMENSIONS

Case : 0603

Unit : mm


MARKING

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating		Unit
			USCD022H	USCD024H	
Repetitive peak reverse voltage	VRRM		20	40	V
Average forward current	IF(AV)		200		mA
Peak forward surge current	IFSM	8.3ms single half sine-wave	2.0		A
Junction temperature	Tj		125		°C
Operating temperature range	Topr		-40 to +125		
Storage temperature range	TSTG		-40 to +125		

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 50mA	-	0.35	-	V
		IF = 100mA	-	0.40	-	
		IF = 200mA	-	0.43	0.45	
Repetitive peak reverse current	IRRM	VR = @ 10V , Ta = 25 °C	-	1.5	30	uA
		VR = Max. VRRM , Ta = 25 °C	-	8	50	
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	35	-	pF
Thermal resistance	Rth(JA)	Junction to ambient	-	160	-	°C/W
	Rth(JL)	Junction to lead	-	110	-	°C/W

FIG. 1 - TYPICAL FORWARD CURRENT
DERATING CURVE

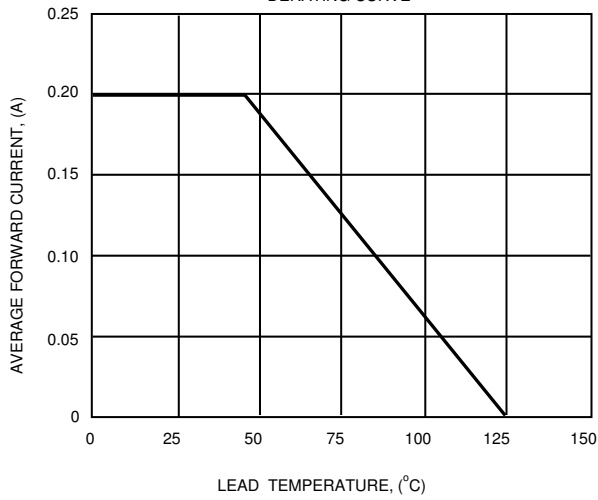


FIG.2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

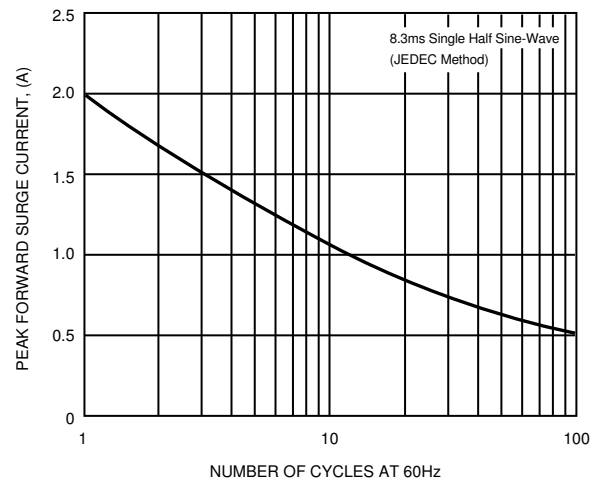


FIG.3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

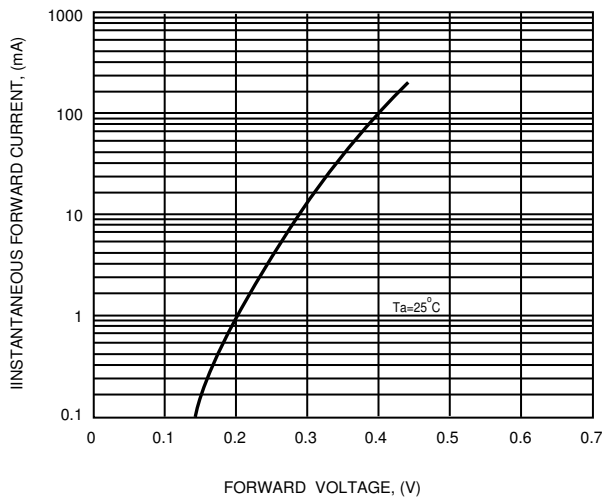


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

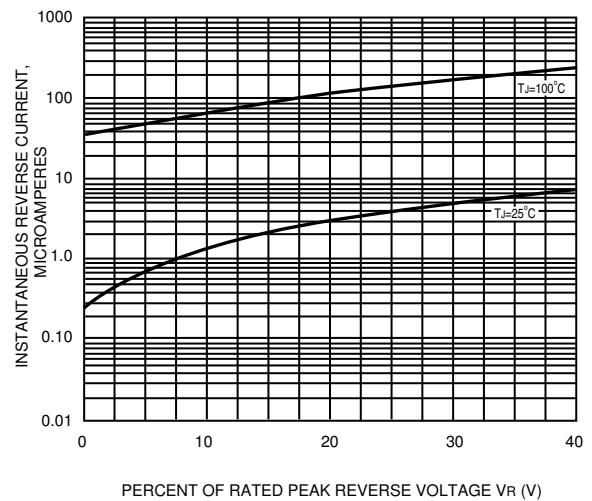


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

