

**USCD024TH**

● **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

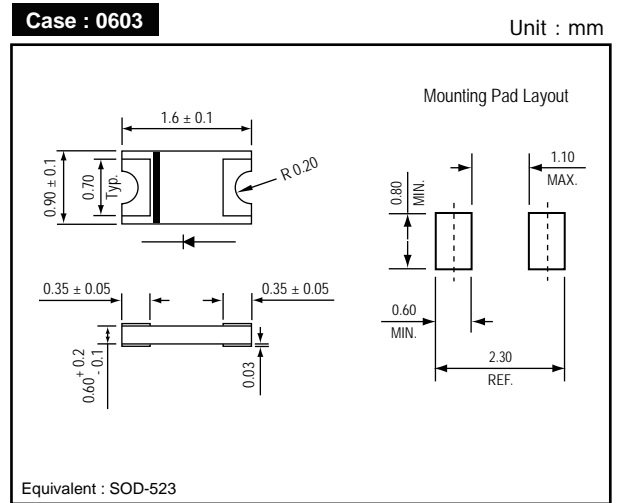
● **MECHANICAL DATA**

**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

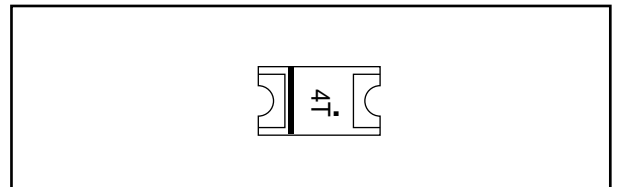
● **PACKING**

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

● **OUTLINE DIMENSIONS**



● **MARKING**



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

ITEM	Symbol	Conditions	Rating	Unit
			USCD024TH	
Repetitive peak reverse voltage	VRRM		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 = 200mA	-	0.58	0.65	V
Repetitive peak reverse current	IRRM	VR = @ 10V, Ta = 25 °C	-	-	0.5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	8	-	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

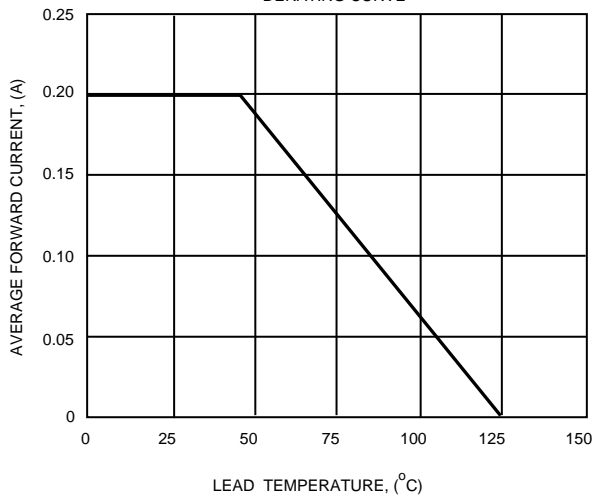


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

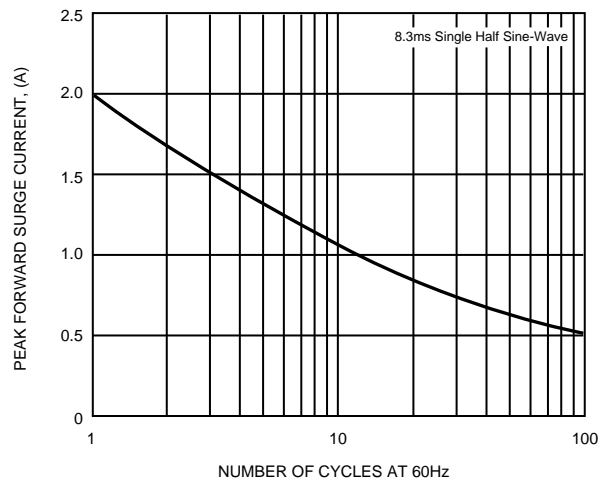


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

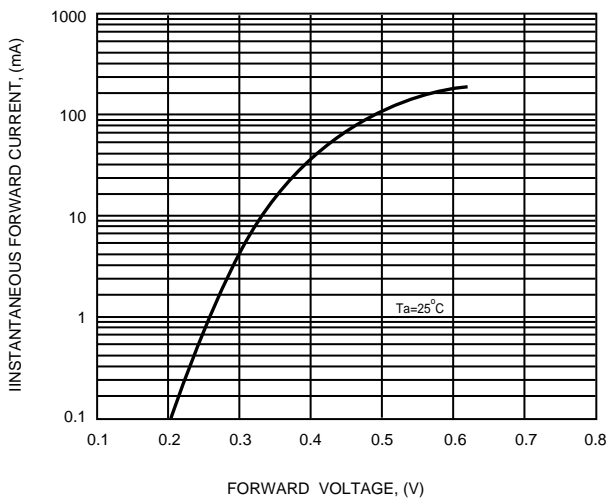


FIG. 4 - REVERSE CHARACTERISTICS

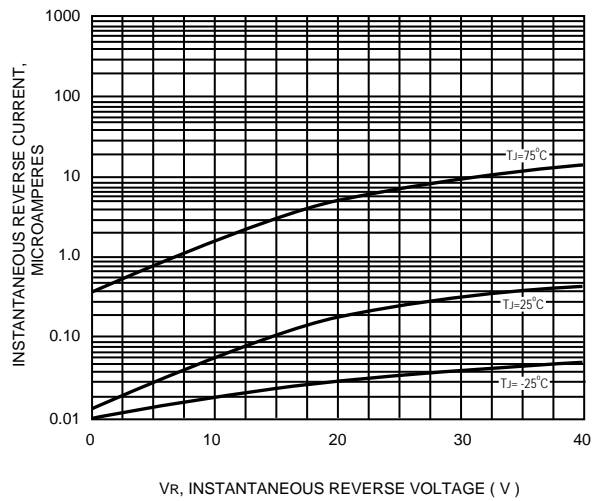


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

