

**USCD104H**

● **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

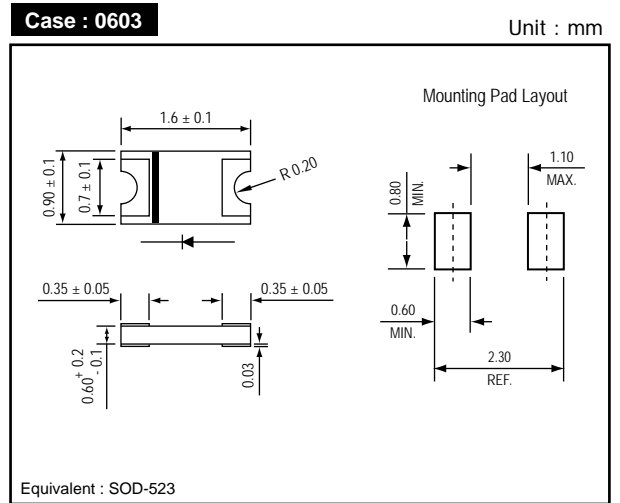
● **MECHANICAL DATA**

**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

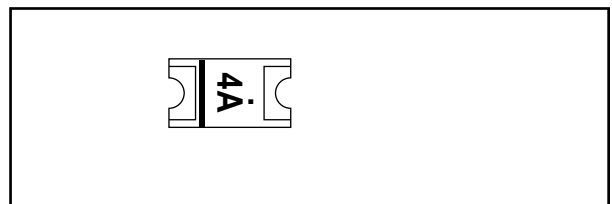
● **PACKING**

- \* 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
Repetitive peak reverse voltage	VRRM		40	V
Average forward current	IF(AV)		1.0	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	5	A
Junction temperature	Tj		125	°C
Operating temperature range	Topr		-55 to +125	
Storage temperature range	TSTG		-55 to +125	

**Electrical characteristics (Ta = 25 °C)**

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 0.1A	-	0.36	-	V
		IF = 0.5A	-	0.46	-	
		IF = 1.0A	-	0.54	0.57	
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C	-	0.01	0.2	mA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	35	-	pF
Thermal resistance	Rth(JA)	Junction to ambient	-	250	-	°C/W
	Rth(JC)	Junction to case	-	160	-	°C/W

NOTES : (1) Mounted on P.C. board with 0.2 x 0.2"(5.0 x 5.0mm) copper pad areas.  
 (3) Preliminary draft.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

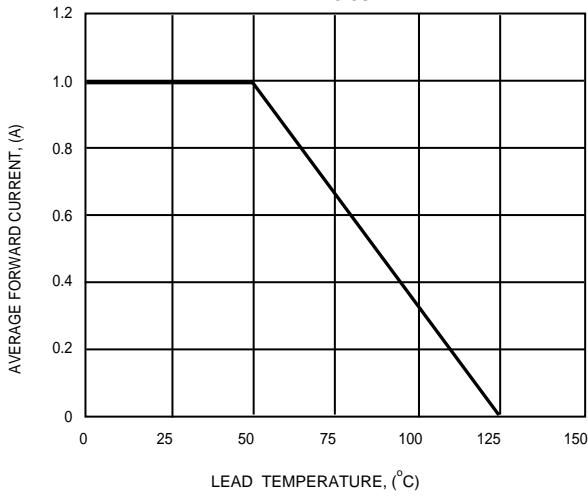


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

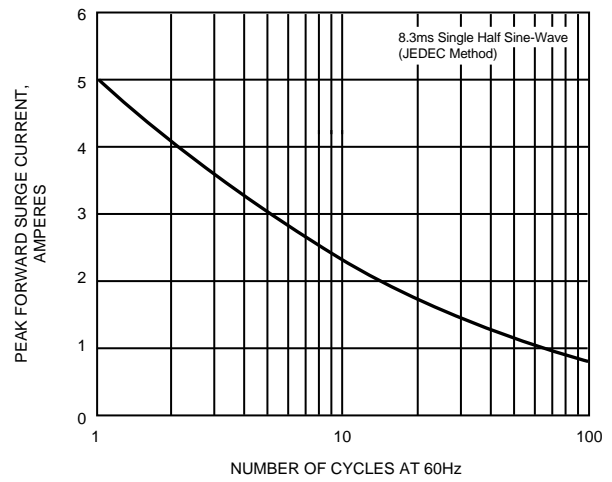


FIG. 3 - FORWARD CHARACTERISTICS

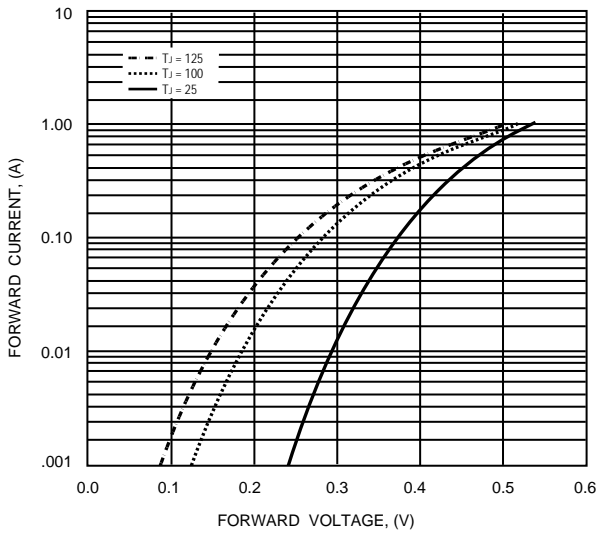


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

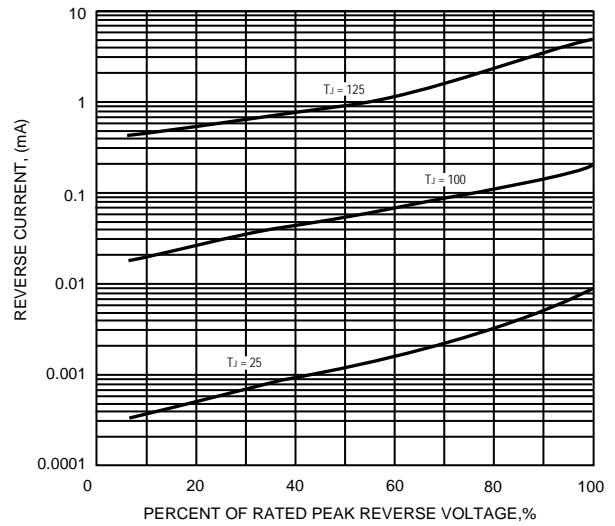


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

