Preliminary
VSCD014

FEATURES

* Lead free product , compliance to RoHs
* Lead less chip form , no lead damage
* Lead-free solder joint , no wire bond & lead frame
* 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 : 0.0015 gram

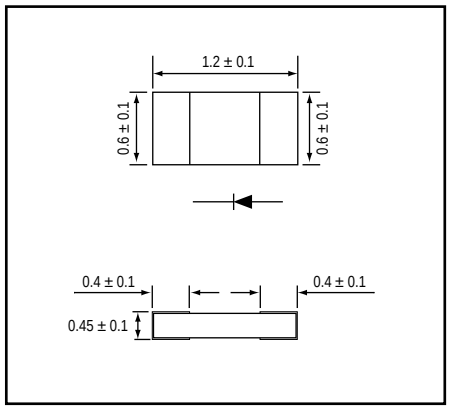
PACKING

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

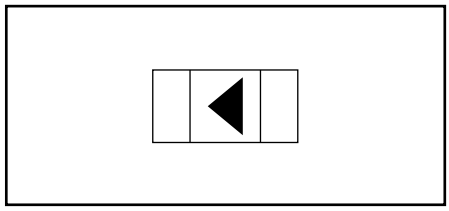
OUTLINE DIMENSIONS

Case : VSCD-0402

Unit : mm



MARKING



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
			VSCD014	
Repetitive peak reverse voltage	V_{RRM}		40	V
Average forward current	$I_{F(AV)}$		100	mA
Peak forward surge current	I_{FSM}	8.3ms single half sine-wave	0.5	A
Junction temperature	T_j		125	°C
Operating temperature range	Topr		-40 to +125	°C
Storage temperature range	T_{STG}		-40 to +125	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F = 10mA	-	-	0.35	V
Repetitive peak reverse current	I_{RRM}	V_R = @ 30V , Ta = 25 °C	-	-	0.5	uA

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

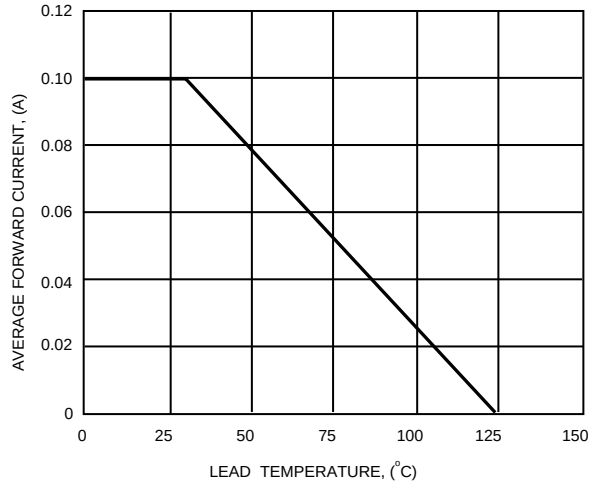


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

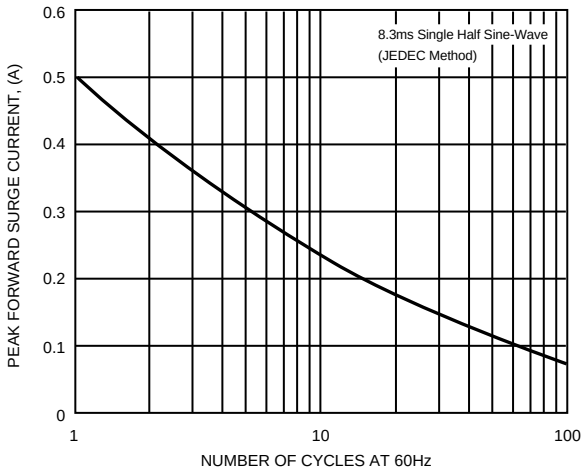


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

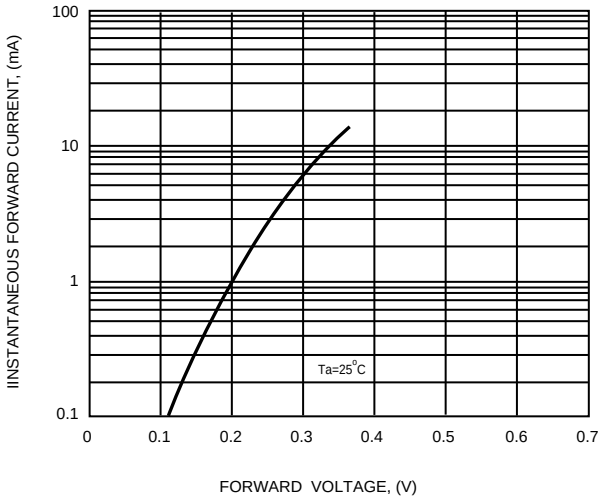


FIG.4 - TYPICAL REVERSE CHARACTERISTICS