

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Lead less chip form, no lead damage
- Lead-free solder joint, no wire bond & lead frame
- Low power loss, High efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

- Case: Packed with FRP substrate and epoxy under filled
- Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
- Polarity : Laser Cathode band marking
- Weight : 0.012 gram

APPLICATION

- High frequency rectification
- AC/DC Power Supply

MARKING

Part Number	SCDS101	SCDS102	SCDS103
Marking	77ZA	77ZB	127Z

PACKAGE INFORMATION

Package	MPQ	Leader Size
1206	3K	7 inch

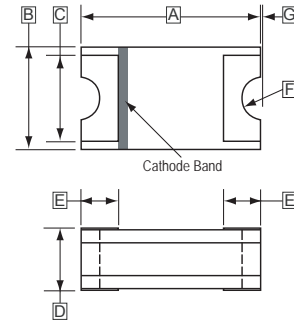
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Part Number			Unit
		SCDS101	SCDS102	SCDS103	
Peak Repetitive Peak reverse voltage	V _{RRM}	50	100	200	V
Maximum Average Forward Current	I _{F(AV)}	1			A
Peak Forward Current @ 8.3 ms half sine-wave	I _{FSM}	30			A
Typical Forward Voltage	V _F	0.7			V
		0.85			
		0.94			
Maximum Repetitive Peak Reverse Current @ V _R = Max. V _{RRM} , T _A = 25 °C	I _{RRM}	1	2		µA
Reverse recovery time	T _{RR}	35			nS
Junction capacitance @ V _R =4V, f=1.0 MHz	C _J	10			pF
Typical Thermal Resistance – Junction to Ambient ¹	R _{θJA}	90			°C / W
Typical Thermal Resistance – Junction to Lead ¹	R _{θJL}	40			
Operating And Storage Temperature Range	T _J , T _{STG}	-65~175			°C

Notes:

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

1206



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.20	3.60	E	0.50	0.90
B	1.70	2.10	F	R 0.40	
C	1.60 TYP.		G	0.05 REF.	
D	0.86	1.16			

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

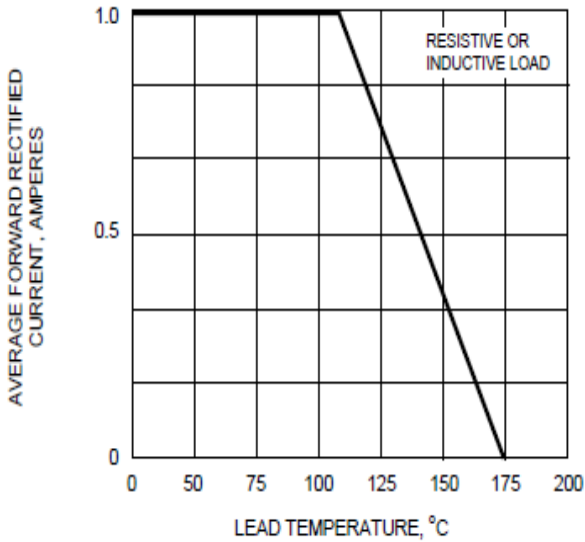


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

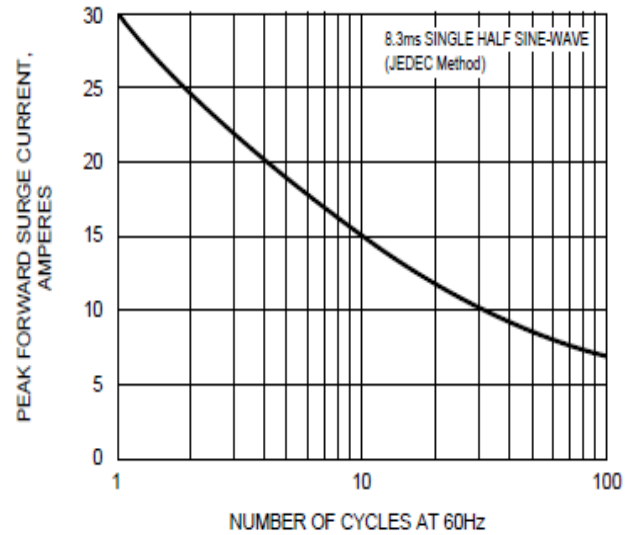


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

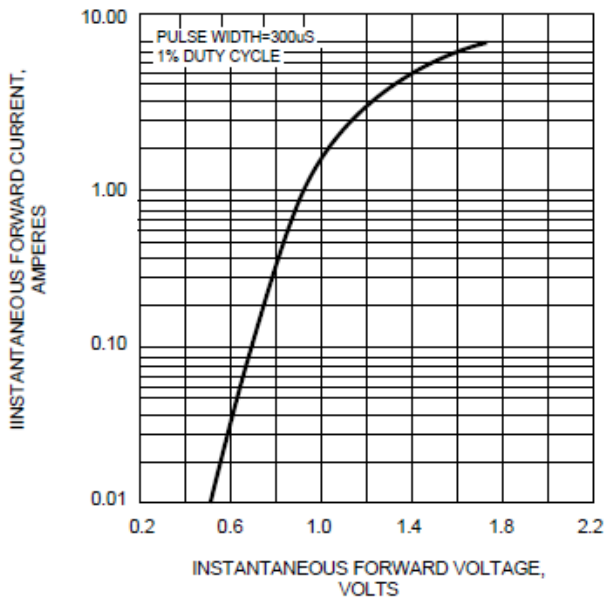


FIG.4 - TYPICAL JUNCTION CAPACITANCE

