



SCD22 THRU SCD210

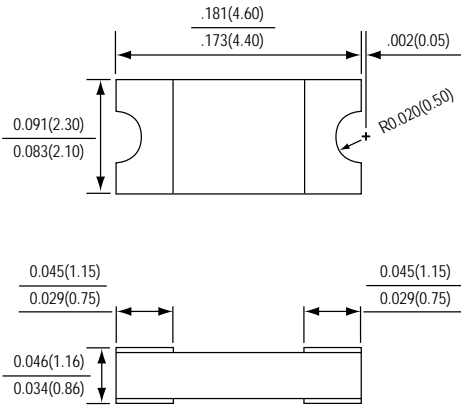
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

Forward Current - 2.0 Amperes

PATENTED

2010



*Dimensions in inches and (millimeters)

SuperChipTM



FEATURES

- * Lead free product
- * Leadless chip form , no lead damage
- * Lead-free solder joint , no wire bond & lead frame
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * For surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Metal to silicon rectifier , majority carrier conduction
- * Low power loss , High efficiency
- * High current capability , low VF
- * High surge capacity
- * For using in low voltage high frequency switching power supply, inverters , free wheeling , and polarity protection applications

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 marking
Weight : 0.02 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	SCD22	SCD24	SCD26	SCD210	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	100	Volts
Maximum RMS voltage	V _{RMS}	14	28	42	70	Volts
Maximum DC blocking voltage	V _{DC}	20	40	60	100	Volts
Maximum average forward rectified current (SEE FIG.1)	I (AV)	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50				Amps
Maximum instantaneous forward voltage at 2.0 A (NOTE 1)	V _F	0.50		0.70	0.85	Volts
Maximum DC reverse current (NOTE 1) @T _J =25°C at rated DC blocking voltage @T _J =100°C	I _R	0.5				mA
		20		10		
Typical thermal resistance (NOTE 2)	R θJA	75				°C / W
	R θJL	17				
Operating junction temperature range	T _J	-55 to +125		-55 to +150		°C
Storage temperature range	T _{STG}	-55 to +150				°C

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.
 (2) Mounted on P.C. board with 0.2 x 0.2"(5.0 x5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES SCD22 THRU SCD210

FIG.1 - FORWARD CURRENT DERATING CURVE

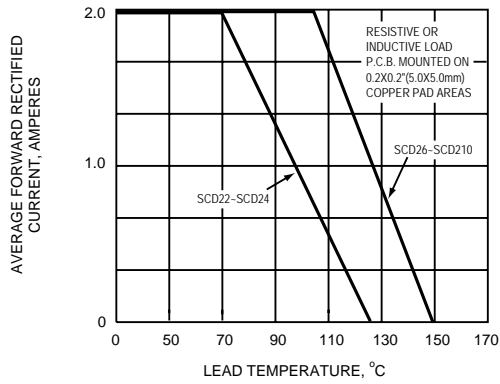


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

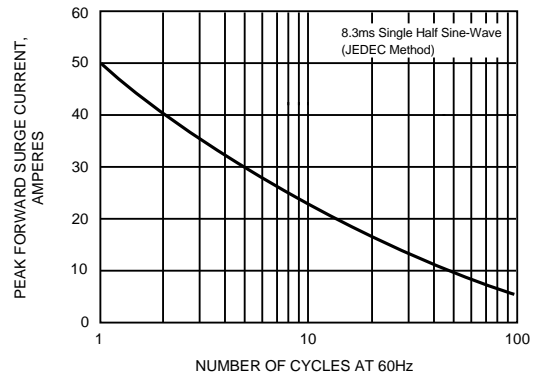


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

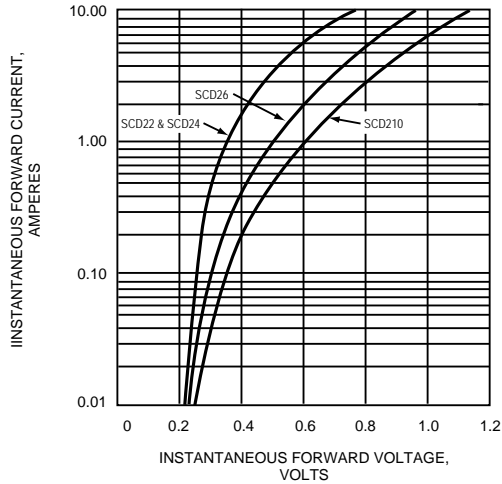


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

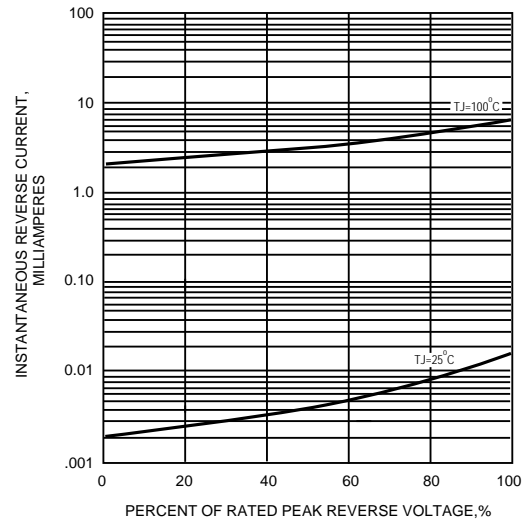


FIG.5 - TYPICAL JUNCTION CAPACITANCE

