



USCD024R

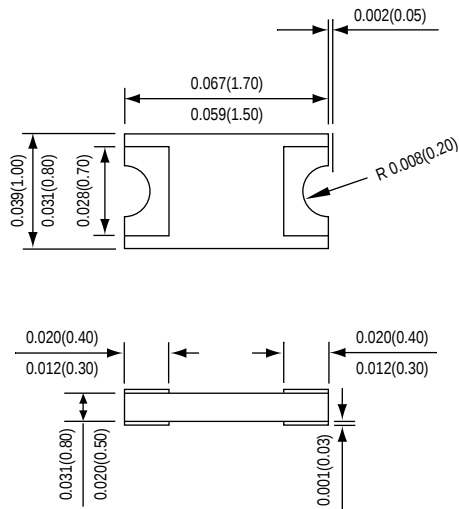
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 40 Volts

Forward Current - 200 mA

PATENTED

0603



*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 V_F , low I_R
- * 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 : Cathode Band, Laser marking

Weight : 0.003 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	USCD024R	UNITS
Maximum repetitive peak reverse voltage	VRRM	40	Volts
Maximum RMS voltage	VRMS	28	Volts
Maximum DC blocking voltage	VDC	40	Volts
Maximum average forward rectified current (SEE FIG.1)	I (AV)	200	mA
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	2.0	Amps
Maximum instantaneous forward voltage at 0.2 A	VF	0.45	Volts
Maximum DC reverse current at Vr @10V	IR	1.0	uA
Junction temperature	TJ	125	°C
Operating temperature	Topr	-40 to +125	
Operating and storage temperature range	Topr, TSTG	- 40 to +125	

RATINGS AND CHARACTERISTIC CURVES OF USCD024R

FIG. 1 - TYPICAL FORWARD CURRENT
DERATING CURVE

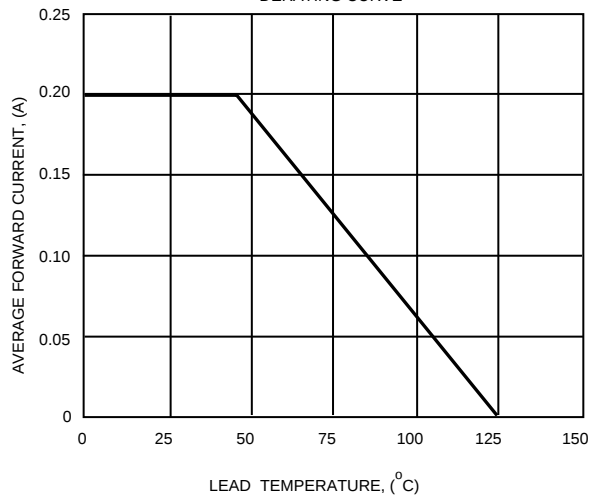


FIG.2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

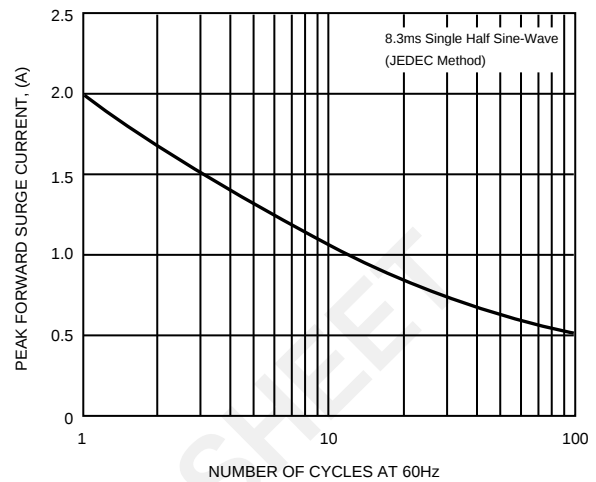


FIG.3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

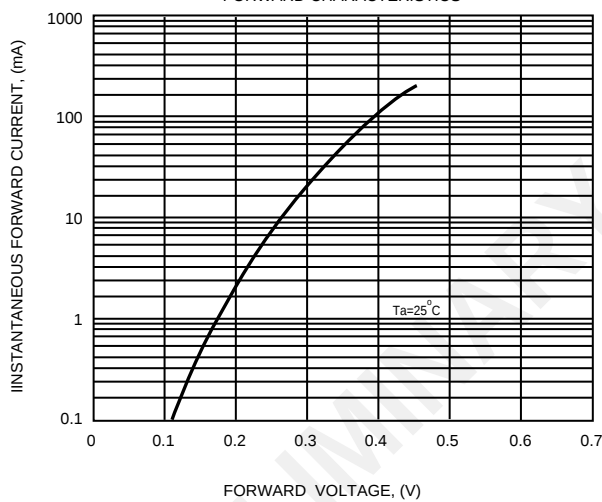


FIG. 4 - REVERSE CHARACTERISTICS

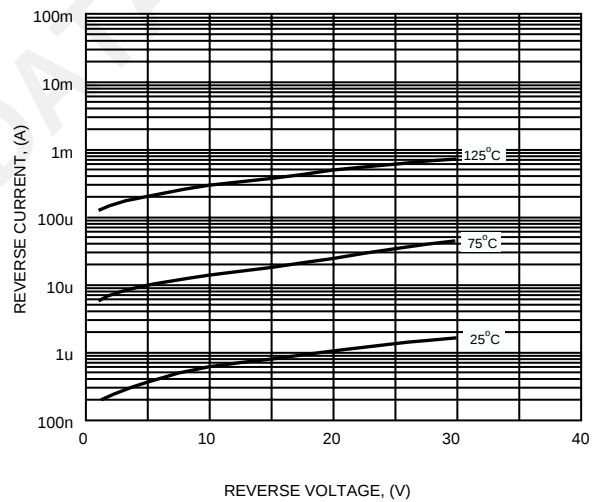


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

