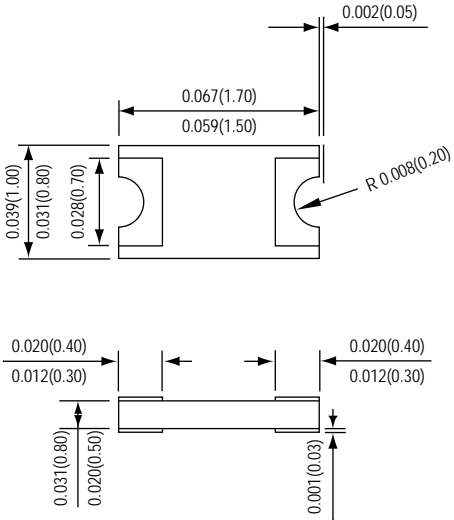

	<h2 style="margin: 0;">USCD012 THRU USCD014</h2> <h3 style="margin: 0;">SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER</h3>				
	<i>Reverse Voltage - 20 to 40 Volts</i>		<i>Forward Current - 100 mA</i>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>PATENTED</p> <p style="text-align: center;">PRELIMINARY</p> <p style="text-align: center;">0603</p>  <p style="text-align: center;">*Dimensions in inches and (millimeters)</p> <p style="text-align: center;">SuperChipTM</p> </div> <div style="width: 45%; text-align: center;">  <p>FEATURES</p> <ul style="list-style-type: none"> * 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 <p>MECHANICAL DATA</p> <p>Case : Packed with FRP substrate and epoxy underfilled</p> <p>Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.</p> <p>Polarity : Laser marking</p> <p>Weight : 0.003 gram</p> </div> </div>	<p>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</p>				
	<p><i>Ratings at 25 °C ambient temperature unless otherwise specified.</i></p>				
		SYMBOLS	USCD012	USCD014	UNITS
	Maximum repetitive peak reverse voltage	VRRM	20	40	Volts
Maximum RMS Voltage	VRMS	14	28	Volts	
Maximum DC Blocking Voltage	VDC	20	40	Volts	
Average Forward Rectified Current	IO	100		mA	
Peak Forward Surge Current at 8.3 ms single half sine-wave	IFSM	2.0		Amps	
Maximum Instantaneous Forward Voltage at 0.1 A	VF	0.40		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	50		uA	
Maximum DC Reverse Current at 10 V	IR	20		uA	
Junction Temperature	TJ	+125		°C	
Storage temperature range	TSTG	-40 to +125		°C	

RATINGS AND CHARACTERISTIC CURVES USCD012 THRU USCD014

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

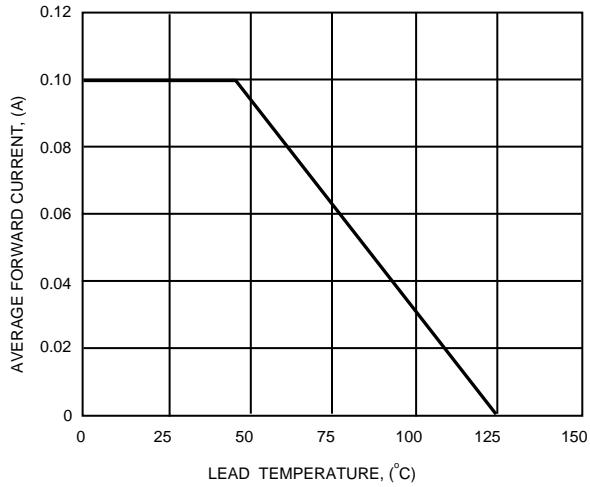


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

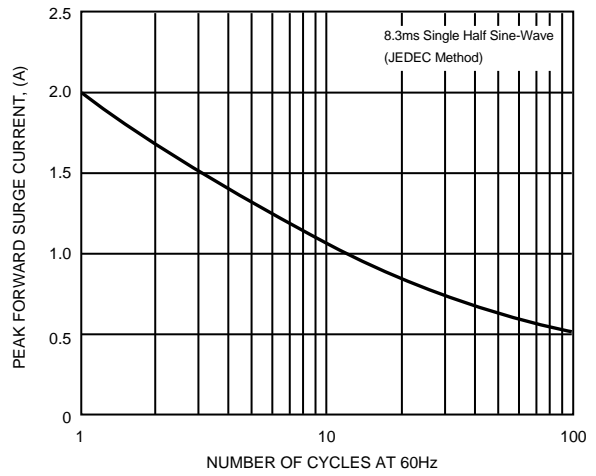


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

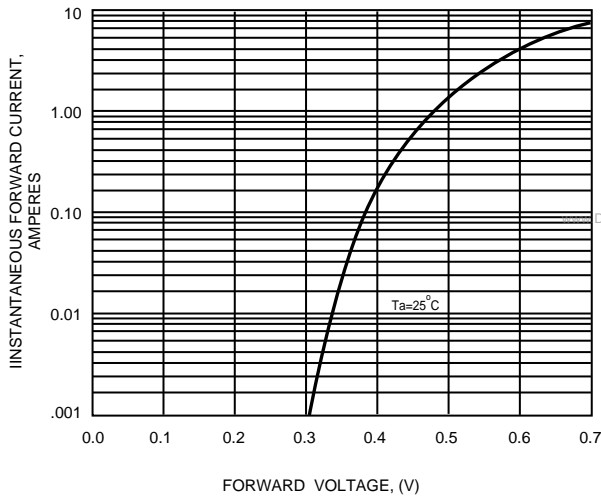


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

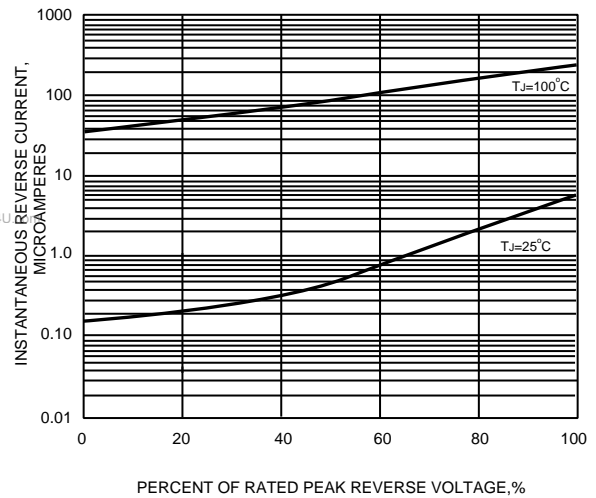


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

