



UCR

CURRENT REGULATIVE DIODE

CURRENT REGULATOR DIODES

DESCRIPTION

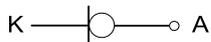
The UTC **UCR** is a CRD diode, which supplies constant current to an electric circuit, even if the power supply voltage fluctuations or load impedance fluctuations occur, can steady a current at a fixed value.

CRD diode is used for current stabilization and current limiting.

FEATURES

- * Than 1V or less low voltage constant current implementation
- * Maximum voltage of 100V or more
- * Good frequency response characteristics
- * AC equivalent impedance is high
- * Negative temperature coefficient
- * Low start-up voltage
- * DC equivalent impedance is low

SYMBOL

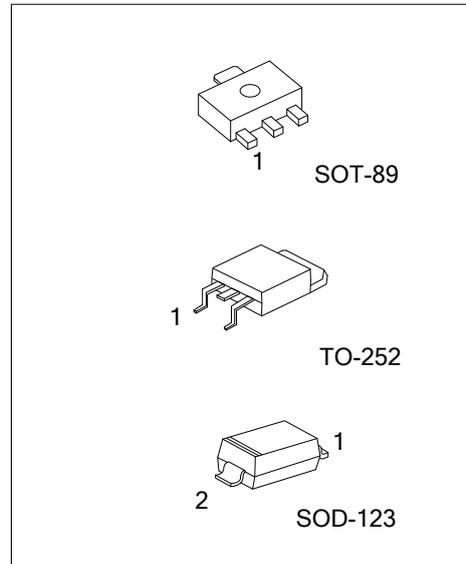


ORDERING INFORMATION

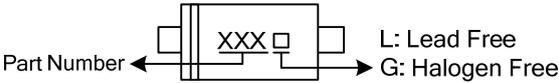
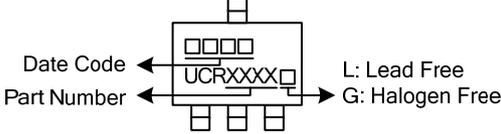
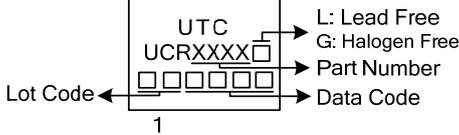
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UCR100L-CA2-R	UCR100G-CA2-R	SOD-123	A	K	-	Tape Reel
UCR2050L-AB3-R	UCR2050G-AB3-R	SOT-89	K	K	A	Tape Reel
UCR2050L-TN3-R	UCR2050G-TN3-R	TO-252	K	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>UCRXXXXG-AB3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube, R: Tape Reel (2) CA2: SOD-123, AB3: SOT-89, TN3: TO-252 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

PACKAGE	MARKING
SOD-123	 <p>Part Number ← XXX → L: Lead Free G: Halogen Free</p>
SOT-89	 <p>Date Code ← □□□□ → L: Lead Free Part Number ← UCRXXXX → G: Halogen Free</p>
TO-252	 <p>Lot Code ← UTC → L: Lead Free UCRXXXX → G: Halogen Free Part Number Data Code</p> <p>1</p>

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

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Operating Voltage	P _{OV}	70	V
		Normal	V
Power Dissipation	P _D	0.5	W
Operating Junction Temperature	T _J	+125	°C
Storage Temperature	T _{STG}	-40 ~ +125	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

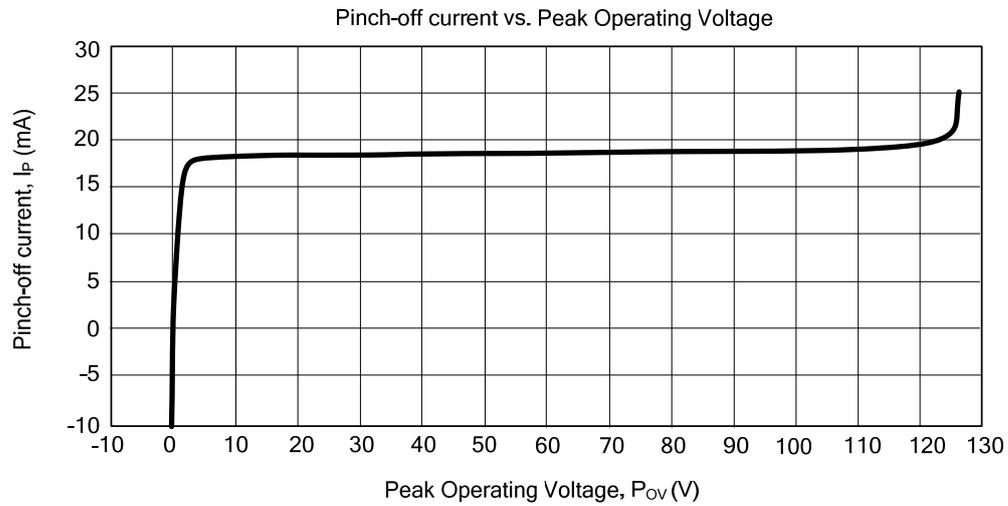
■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Typical Thermal Resistance	θ _{JC}	43	°C/W
		6	°C/W
	θ _{JL}	20	°C/W

■ ELECTRICAL CHARACTERISTICS (PER LEG) (T_A =25°C unless otherwise specified.)

PART NUMBER	MARKING	TEST VOLTAGE (V)	PINCH-OFF CURRENT			LIMITING CURRENT		LIMITING CURRENT RATIO
			I _P (mA)			V _K (V)	I _K (mA)	I _{30V} / I _P
			MIN.	TYP.	MAX.			
UCR100	100	10	0.80	1.0	1.20	≤2.5	0.8 I _P	≤1.1
UCR2050	2050	10	17.0	20.50	24.0	≤4.0	0.8 I _P	≤1.1

■ TYPICAL CHARACTERISTICS



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