

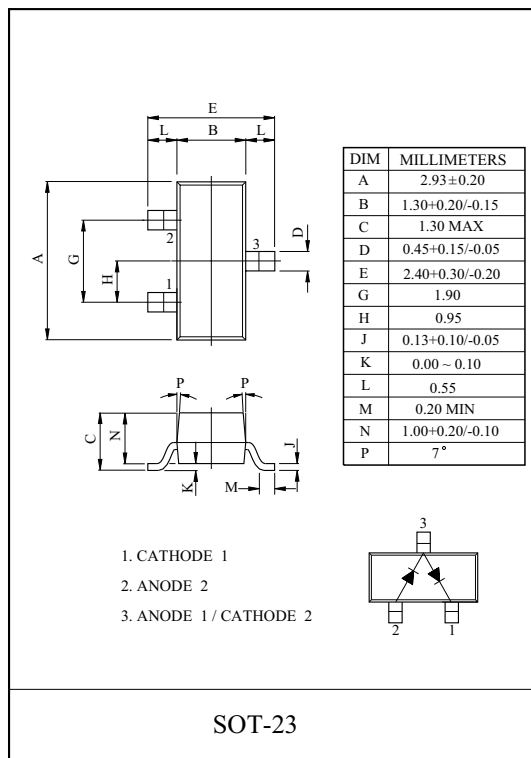
HIGH SPEED RECTIFICATION  
(SWITCHING REGULATORS, CONVERTERS, CHOPPERS)  
UNIVERSAL-USE RECTIFIERS.

#### FEATURES

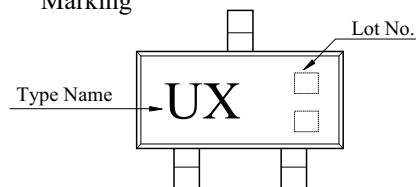
- Low Forward Voltage :  $V_F \text{ max}=0.55\text{V}$
- Fast reverse recovery time ( $t_{rr} \text{ max}=10\text{nS}$ )
- Low switching noise.
- Low leakage current and high reliability due to Highly reliable planar structure.
- Series connection of 2 elements in an SOT-23 package facilitates high-density mounting and permits KDR731S applied equipment to be made smaller.

#### MAXIMUM RATING ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive (Peak) Reverse Voltage	$V_{RRM}$	30	V
Non-Repetitive (Peak) Reverse Surge Voltage	$V_{RSM}$	35	V
Average Forward Current	$I_O$	70	mA
Surge Forward Current	$I_{FSM}$	2	A
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 125	$^\circ\text{C}$



#### Marking

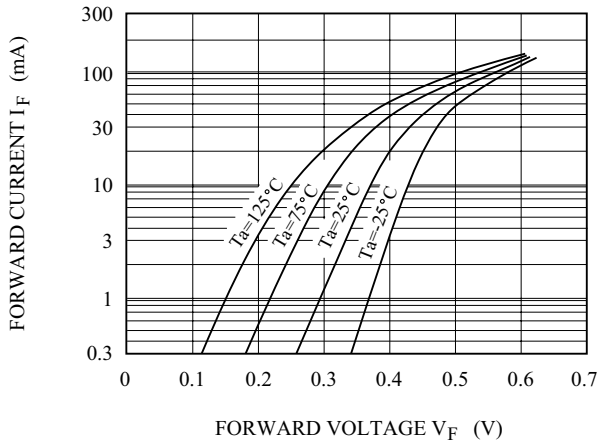


#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

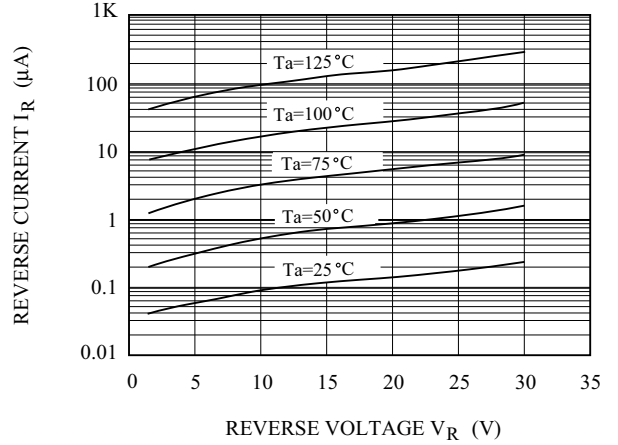
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$V_R$	$I_R=20\mu\text{A}$	30	-	-	V
Forward Voltage	$V_F$	$I_F=70\text{mA}$	-	-	0.55	V
Reverse Current	$I_R$	$V_R=15\text{V}$	-	-	5	$\mu\text{A}$
Total Capacitance	$C_T$	$V_R=10\text{V}, f=1\text{MHz}$	-	5.0	-	pF
Reverse Recovery Time	$t_{rr}$	$I_R=I_F=10\text{mA}$	-	-	10	nS

# KDR731S

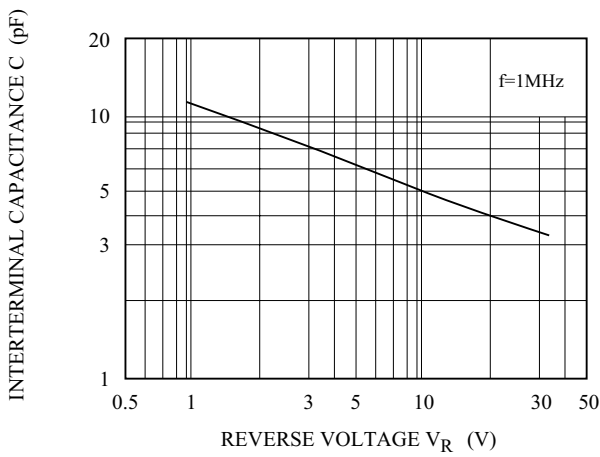
$I_F - V_F$



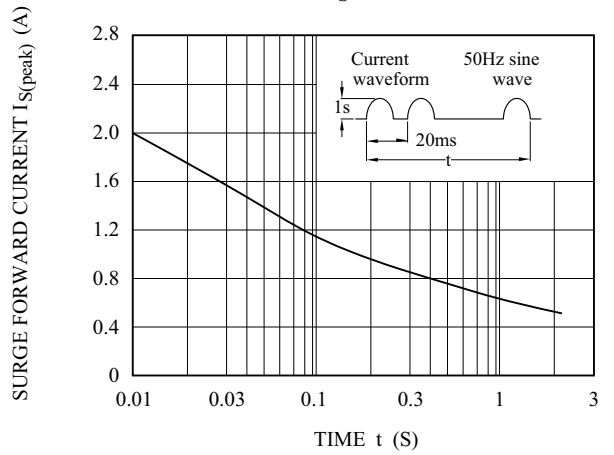
$I_R - V_R$



$C - V_R$



$I_S - t$



$t_{rr}$  TEST CIRCUIT

Duty  $\leq 10\%$

