

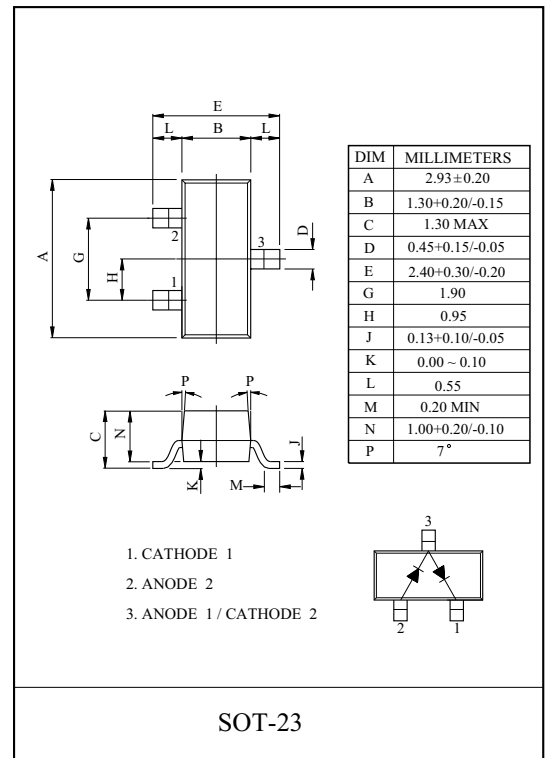
HIGH SPEED RECTIFICATION
(SWITCHING REGULATORS, CONVERTERS, CHOPPERS)
UNIVERSAL-USE RECTIFIERS.

FEATURES

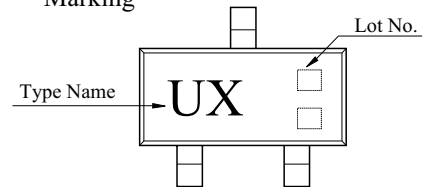
- Low Forward Voltage : $V_F \text{ max}=0.55\text{V}$
- Fast reverse recovery time ($t_{rr} \text{ max}=10\text{nS}$)
- Low switching noise.
- Low leakage current and high reliability due to Highly reliable planar structure.
- Series connection of 2 elements in an SOT-23 package facilitates high-density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

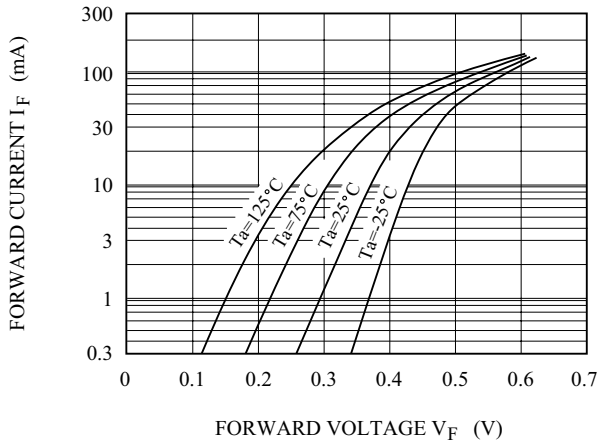


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

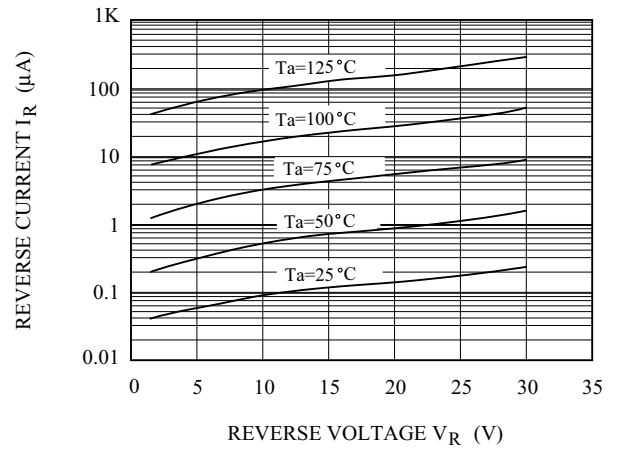
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R=20\mu\text{A}$	30	-	-	V
Forward Voltage	V_F	$I_F=70\text{mA}$	-	-	0.55	V
Reverse Current	I_R	$V_R=15\text{V}$	-	-	5	μA
Total Capacitance	C_T	$V_R=10\text{V}, f=1\text{MHz}$	-	5.0	-	pF
Reverse Recovery Time	t_{rr}	$I_R=I_F=10\text{mA}$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

KDR731S

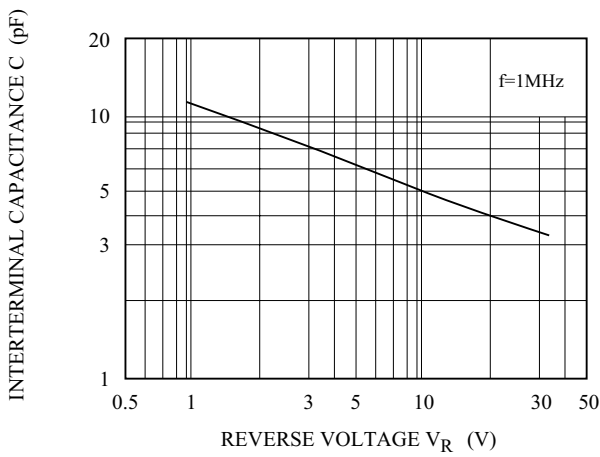
$I_F - V_F$



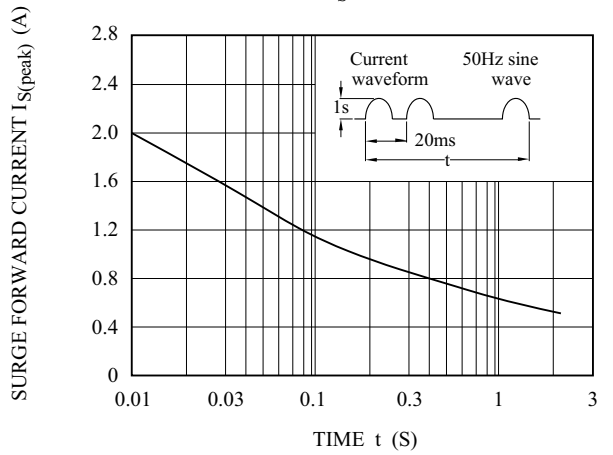
$I_R - V_R$



$C - V_R$



$I_S - t$



t_{rr} TEST CIRCUIT

Duty $\leq 10\%$

