

ULTRA HIGH SPEED SWITCHING APPLICATION.

FEATURES

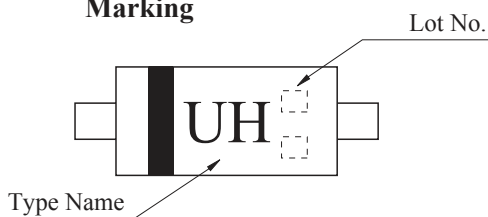
- Small Package : USC.
- Low Forward Voltage.
- Fast Reverse Recovery Time.
- Small Total capacitance.
- Suffix U : Qualified to AEC-Q101.
ex) KDS4148U-RTK/HU

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Maximum (Peak) Forward Current	I_{FM}	450	mA
Average Forward Current	I_O	150	mA
Surge Current (10mS)	I_{FSM}	2	A
Power Dissipation	P_D^*	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

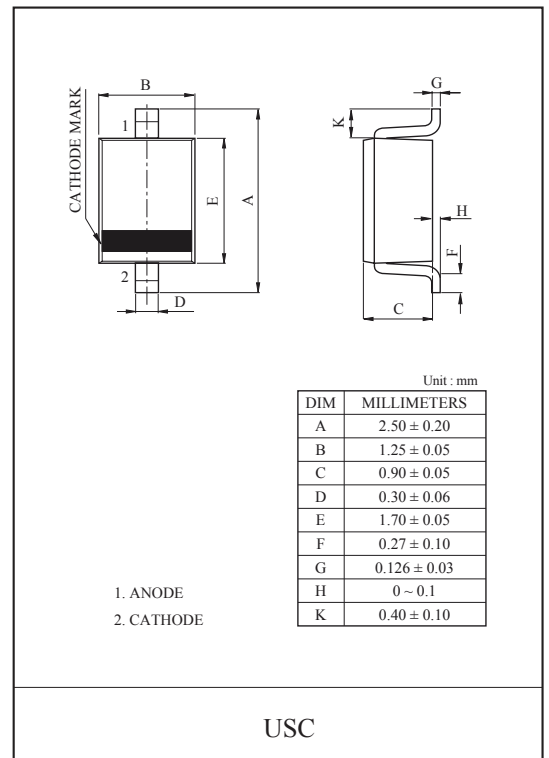
* : Mounted on a glass epoxy circuit board of 20×20mm,
Pad dimension of 4×4mm.

Marking



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	$I_F=1mA$	-	0.60	-	V
	$V_{F(2)}$	$I_F=10mA$	-	0.72	-	
	$V_{F(3)}$	$I_F=100mA$	-	0.90	1.20	
Reverse Current	I_R	$V_R=75V$	-	-	0.5	μA
Total Capacitance	C_T	$V_R=0V, f=1MHz$	-	0.9	2.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$	-	1.6	4.0	nS



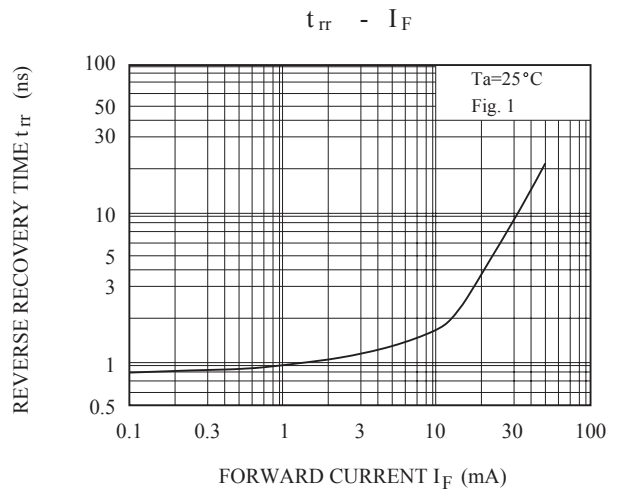
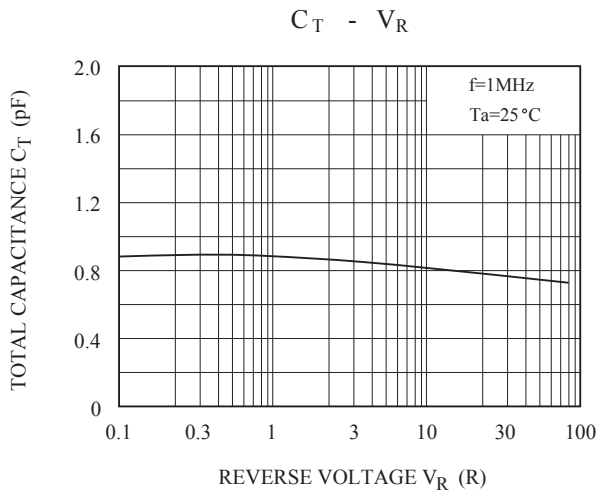
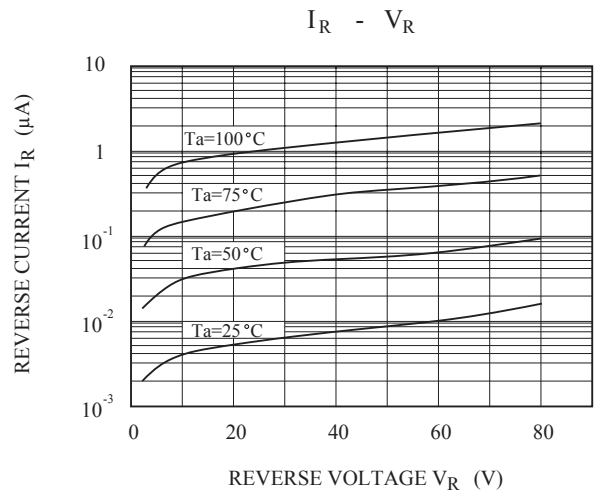
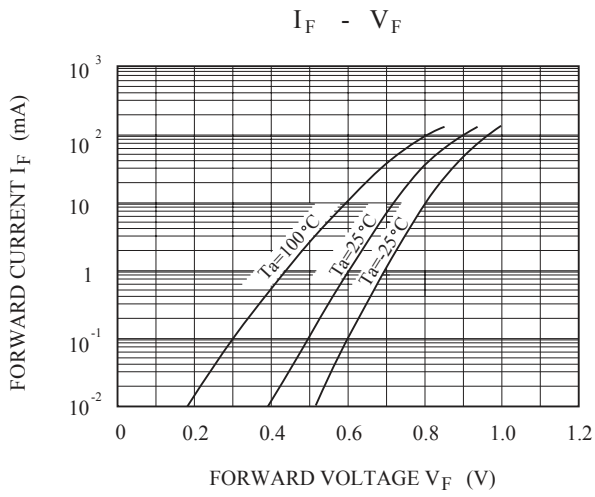


Fig. 1. REVERSE RECOVERY TIME(t_{rr}) TEST CIRCUIT

