

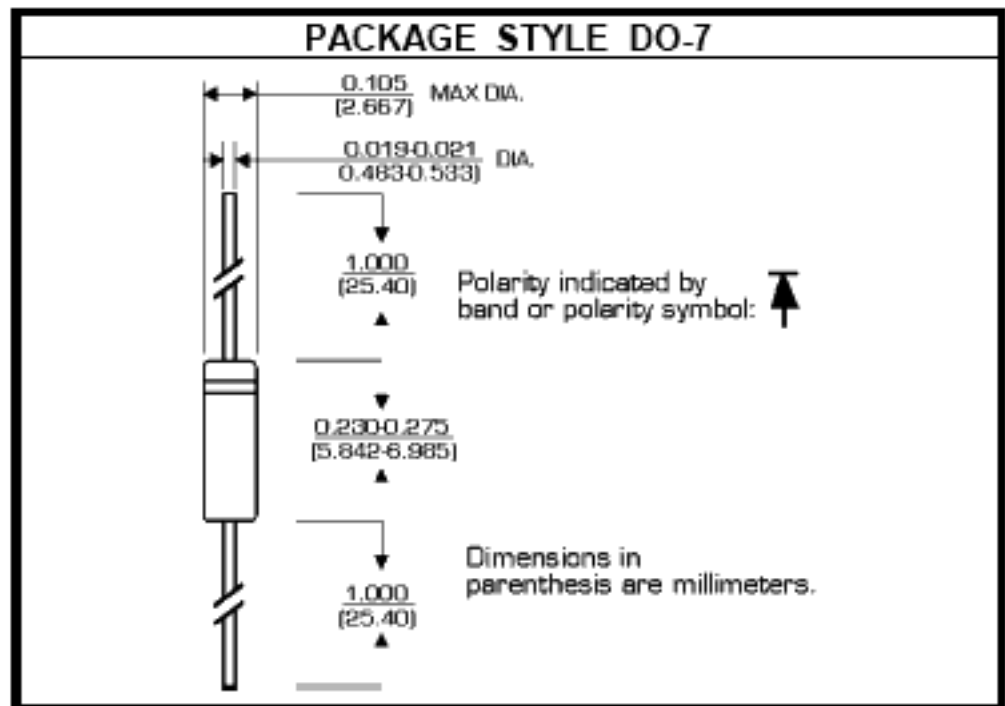
# SILICON HYPERABRUPT TUNING VARACTOR

## DESCRIPTION:

The **ASI KV2101** is a Silicon Hyperabrupt Tuning Varactor Diode Designed for UHF Applications up to 800 MHz. The Cathode is Indicated by a Color Band.

## MAXIMUM RATINGS

$I_F$	40 mA
$V_R$	22 V
$P_{DISS}$	200 mW @ $T_A = 25\text{ }^\circ\text{C}$
$T_J$	-55 $^\circ\text{C}$ to +175 $^\circ\text{C}$
$T_{STG}$	-55 $^\circ\text{C}$ to +175 $^\circ\text{C}$



## CHARACTERISTICS $T_A = 25\text{ }^\circ\text{C}$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
$V_R$	$I_R = 10\text{ }\mu\text{A}$		22			V
$I_R$	$V_R = 20\text{ V}$				100	$\mu\text{A}$
$C_{T3}$	$V_R = 3.0\text{ V}$	$f = 1.0\text{ MHz}$	10.5	11.5	12.5	pF
$C_{T8}$	$V_R = 8.0\text{ V}$	$f = 1.0\text{ MHz}$	4.3	5.0	5.7	pF
$C_{T20}$	$V_R = 20\text{ V}$	$f = 1.0\text{ MHz}$	2.0	2.15	2.3	pF
$\Delta C_T$	$V_R = 3\text{ to }20\text{ V}$	$f = 1.0\text{ MHz}$	5.0	5.5	5.8	RATIO
Q	$V_R = 3.0\text{ V}$	$f = 50\text{ MHz}$	300			