

SEMICONDUCTOR TECHNICAL DATA

KDV804M/S

VARIABLE CAPACITANCE DIODE
SILICON EPITAXIAL PLANAR DIODE

TUNING OF SEPERATE RESONANT CIRCUIT, PUSH-PULL CIRCUIT IN FM RANGE, ESPECIALLY FOR CAR AUDIO.

FEATURES

- Low Series Resistance : $r_s=0.3(\text{TYP.})$.
- Small Package : SOT-23.

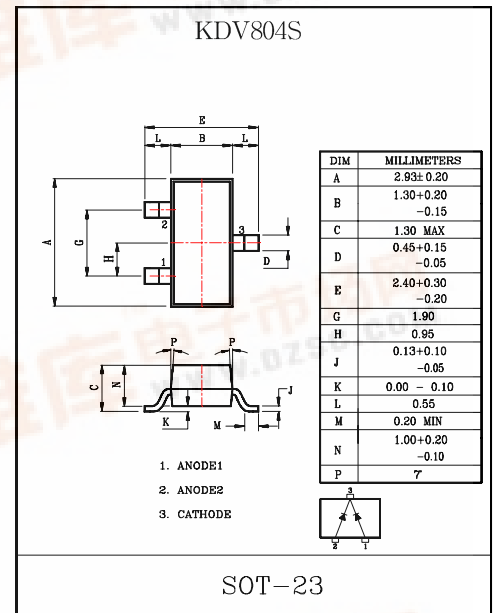
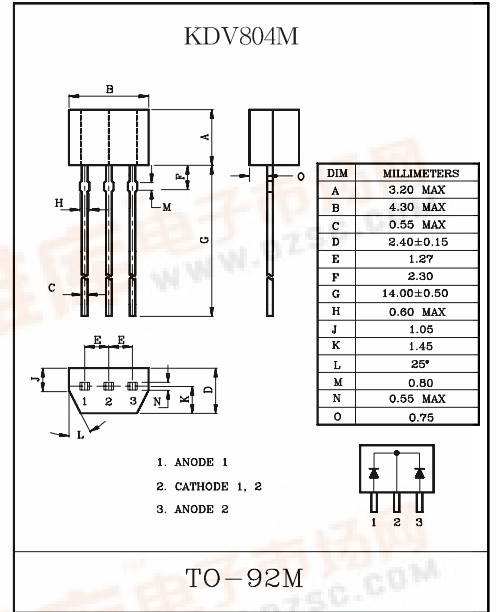
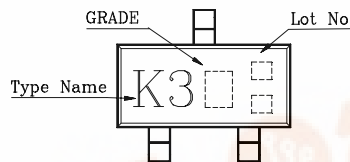
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$

CLASSIFICATION OF CAPACITANCE GRADE

GRADE	CAPACITANCE(C_{2V})	UNIT
A	42~43.5	pF
B	43~44.5	
C	44~45.5	
D	45~46.5	
E	46~47.5	

Marking



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R=10\mu\text{A}$	15	-	-	V
Reverse Current	I_R	$V_R=15\text{V}$	-	-	50	nA
Capacitance	C_{2V}	$V_R=2\text{V}, f=1\text{MHz}$	42	-	47.5	pF
	C_{8V}	$V_R=8\text{V}, f=1\text{MHz}$	24	-	28.8	
Capacitance Ratio	C_{2V}/C_{8V}		1.65	-	1.8	
Series Resistance	r_s	$C=38\text{pF}, f=100\text{MHz}$	-	0.3	0.4	Ω

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