

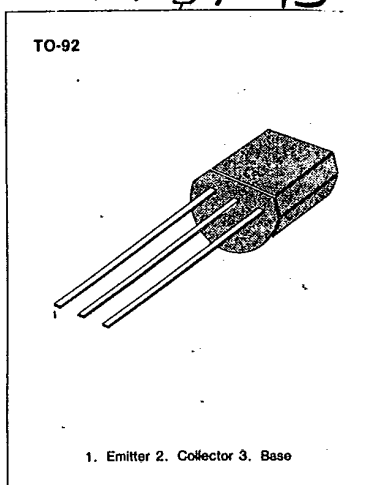
KSR2012

PNP EPITAXIAL SILICON TRANSISTOR

T-37-13

SWITCHING APPLICATION (Bias Resistor Built In)

- Switching Circuit, Inverter, interface circuit
Driver circuit
- Built in bias Resistor ($R=47K\Omega$)
- Complement to KSR1012



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Collector Dissipation	P_C	300	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55-150	$^\circ C$

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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-40			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -1mA$	100		600	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -1mA$			-0.3	V
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0$ $f = 1MHz$		5.5		pF
Current Gain Bandwidth Product	f_T	$V_{CE} = -10V, I_C = -5mA$		200		MHz
Input Resistor	R		32	47	62	K Ω

Equivalent Circuit

