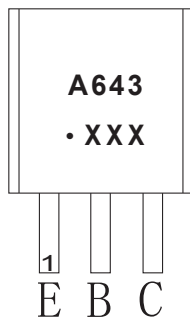


KSA643 TRANSISTOR (PNP)

FEATURE

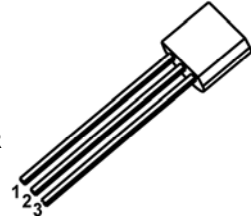
- Collector dissipation
- Complement to KSD261

MARKING

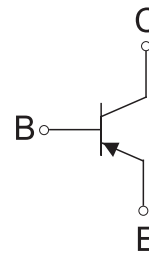


TO-92

1. EMITTER
2. BASE
3. COLLECTOR



Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KSA643	TO-92	Bulk	1000pcs/Bag

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-20	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-500	mA
P _C	Collector Power Dissipation	500	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

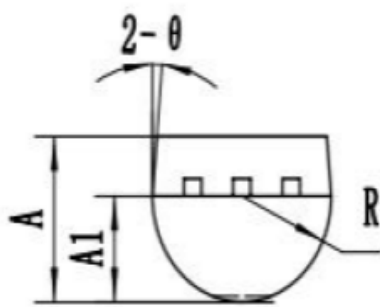
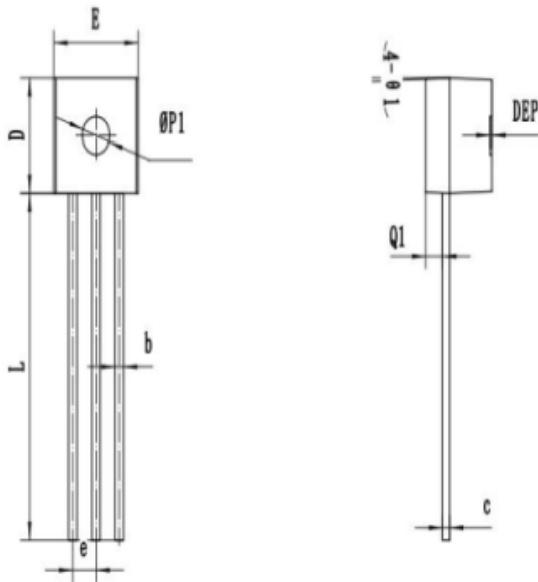
$T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -25\text{V}, I_E = 0$			-0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3\text{V}, I_C = 0$			-0.2	μA
DC current gain	h_{FE}^*	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	40		400	
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.3	V

* PULSE TEST

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	G
Range	40-80	70-140	120-240	200-400



SYMBOL	MM		
	MIN	NOM	MAX
*A	3.00	3.25	3.50
A1	2.20	2.30	2.40
*b	0.40	0.45	0.50
*c	0.25	0.30	0.35
*D	4.50	4.60	4.70
*E	4.50	4.60	4.70
*e	1.22	1.27	1.32
*L	14.00	14.30	14.60
R	2.20	2.30	2.40
Q1	0.85	0.90	0.95
θ	3°	5°	7°
Ø1	1°	3°	5°
ØP1	1.40	1.50	1.60
DEP	0.05	0.10	0.20
带*为检验尺寸			