

KSP75/76/77

PNP EPITAXIAL SILICON DARLINGTON TRANSISTOR

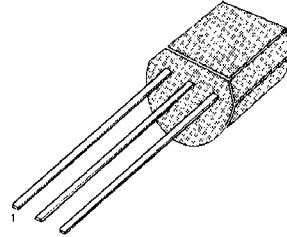
DARLINGTON TRANSISTOR

- Collector-Emitter Voltage: V_{CES} =KSP75: 40V
KSP76: 50V
KSP77: 60V
- Collector Dissipation: P_C (max)=625mW

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CES}		
: KSP75		-40	V
: KSP76		-50	V
: KSP77		-60	V
Emitter-Base Voltage	V_{EBO}	-10	V
Collector Current	I_C	-500	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~150	$^\circ\text{C}$

TO-92



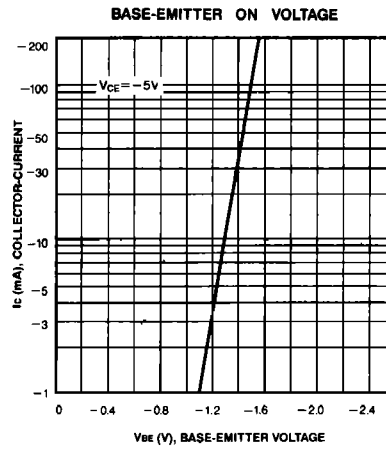
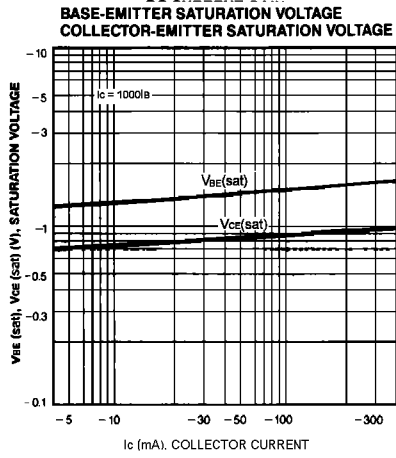
1. Emitter 2. Base 3. Collector

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

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CEO}	$I_C = -100\mu\text{A}, I_B = 0$			
: KSP75			-40		V
: KSP76			-50		V
: KSP77			-60		V
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu\text{A}, I_E = 0$			
: KSP75			-40		V
: KSP76			-50		V
: KSP77			-60		V
Collector Cut-off Current	I_{CBO}	$V_{CE} = -30\text{V}, I_E = 0$ $V_{CE} = -40\text{V}, I_E = 0$ $V_{CE} = -50\text{V}, I_E = 0$ $V_{CE} = -10\text{V}, I_B = 0$			
: KSP75				-100	nA
: KSP76				-100	nA
: KSP77				-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{CE} = -10\text{V}, I_B = 0$			
Collector Cut-off Current	I_{EBO}	$V_{CE} = -10\text{V}, I_B = 0$			
: KSP75				-500	nA
: KSP76				-500	nA
: KSP77				-500	nA
DC Current Gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $V_{CE} = -5\text{V}, I_C = -100\text{mA}$	10K 10K		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -0.1\text{mA}$		-1.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -5\text{V}, I_C = -100\text{mA}$		-2	V

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