

Silicon PNP Epitaxial Type

2SA1241

FEATURESF

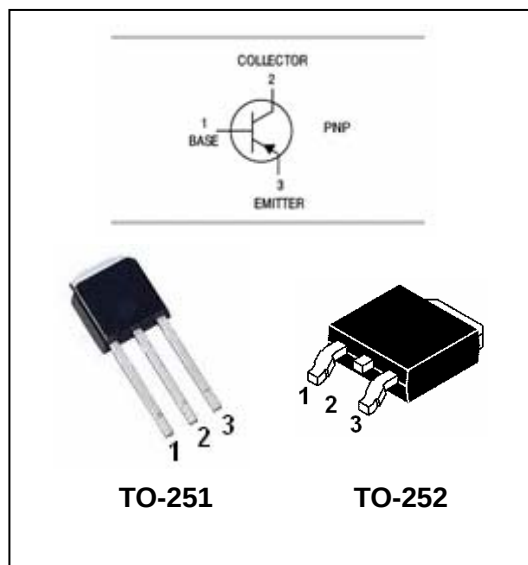
- Excellent Switching Time: $T_{stg}=1.0\mu s$ (Typ.)
- Low collector saturation voltage.
- Complementary to 2SC3076



Lead-free

APPLICATIONS

- Power Amplifier Applications.
- Power Switching Applications.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter		Value	Units
V_{CBO}	Collector-Base Volage		-50	V
V_{CEO}	Collector-Emitter Voltage		-50	V
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current		-2	A
I_B	Base Current		-1	A
P_C	Collector Power Dissipation	$T_a=25^\circ C$	1.0	W
		$T_c=25^\circ C$	10	
T_j, T_{stg}	Junction and Storage temperature range		-55 to +150	$^\circ C$



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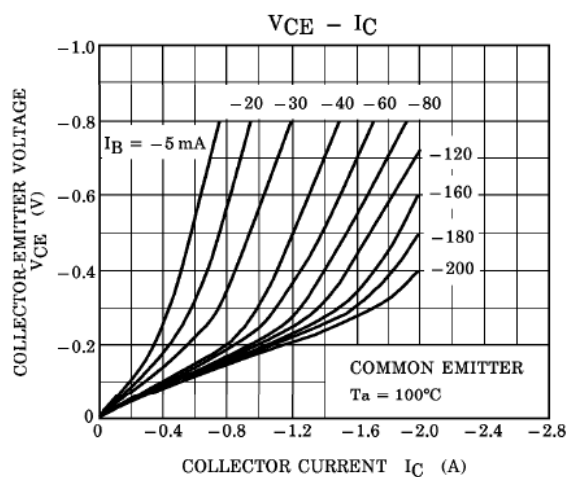
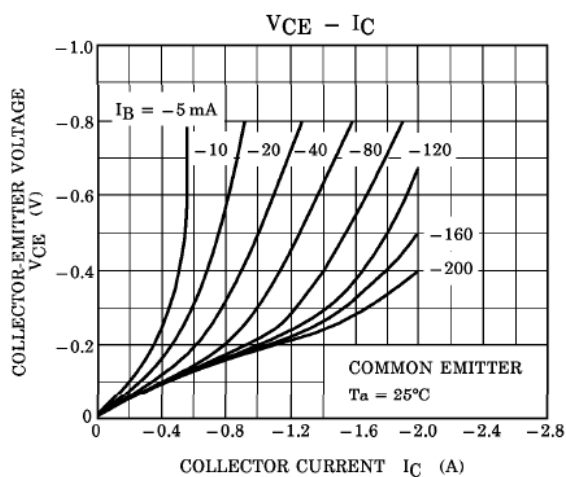
ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	V_{CEO}	$I_C=-10\text{mA}, I_B=0$	-50			V
Collector cut-off current	I_{CBO}	$V_{CB}=-50\text{V}, I_E=0$			-1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EBO}=-5\text{V}, I_C=0$			-1.0	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$	70		240	
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-1.5\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1\text{A}, I_B=-0.05\text{A}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-1\text{A}, I_B=-0.05\text{A}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-2\text{V}, I_C=-0.5\text{A}$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		40		pF

CLASSIFICATION OF $h_{FE(1)}$

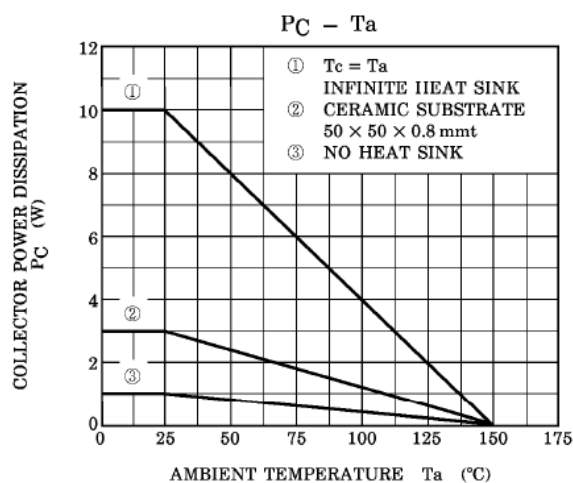
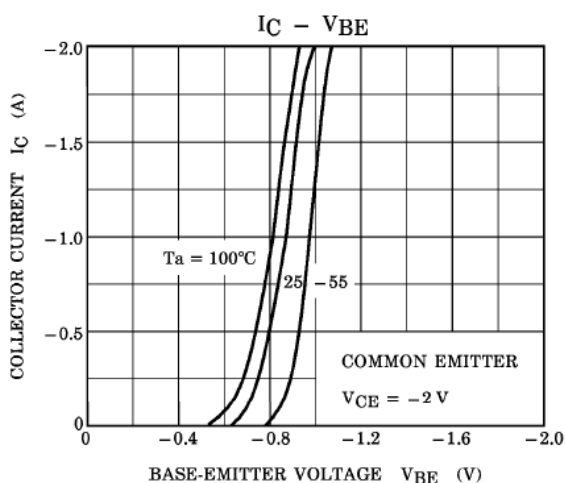
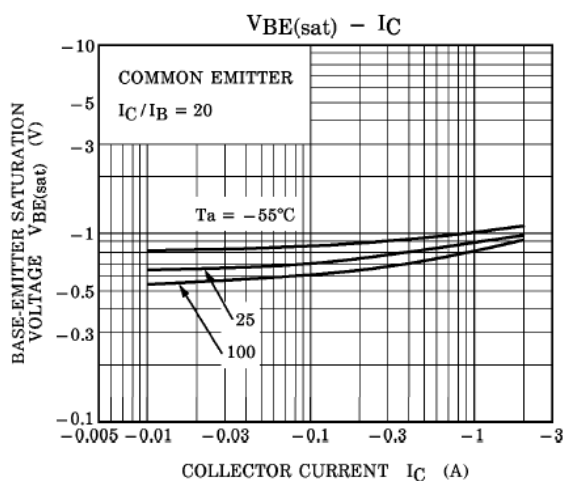
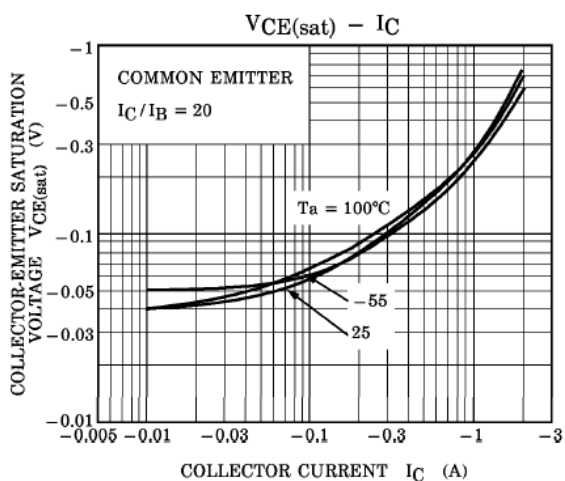
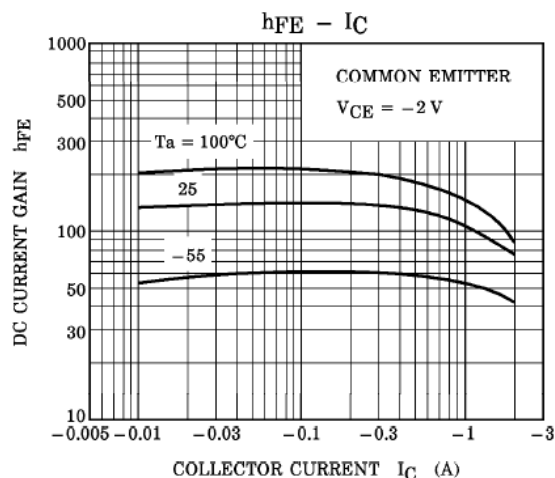
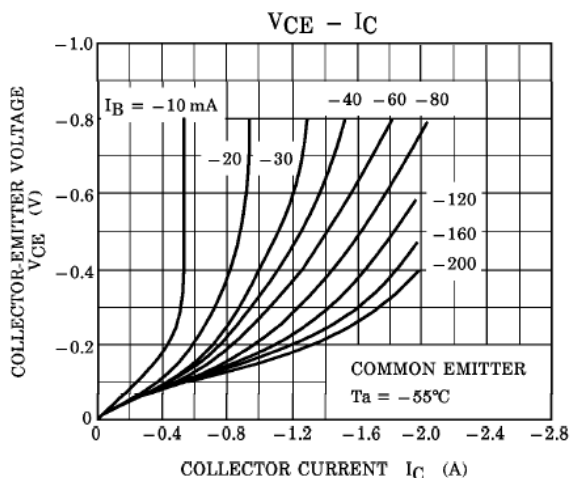
Rank	O	Y
Range	70-140	120-240

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



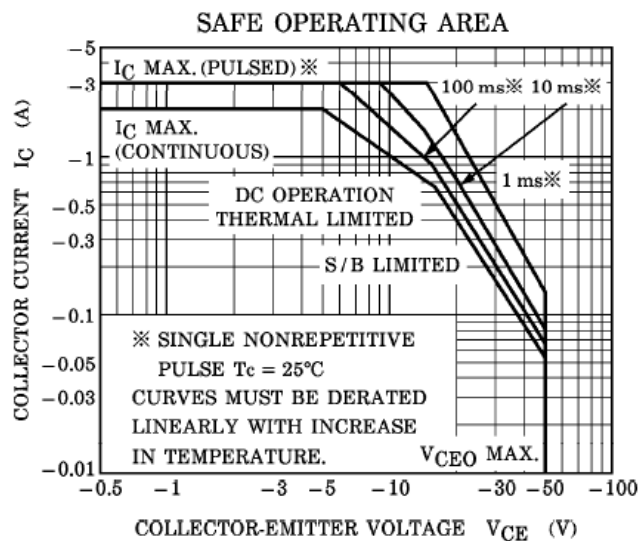
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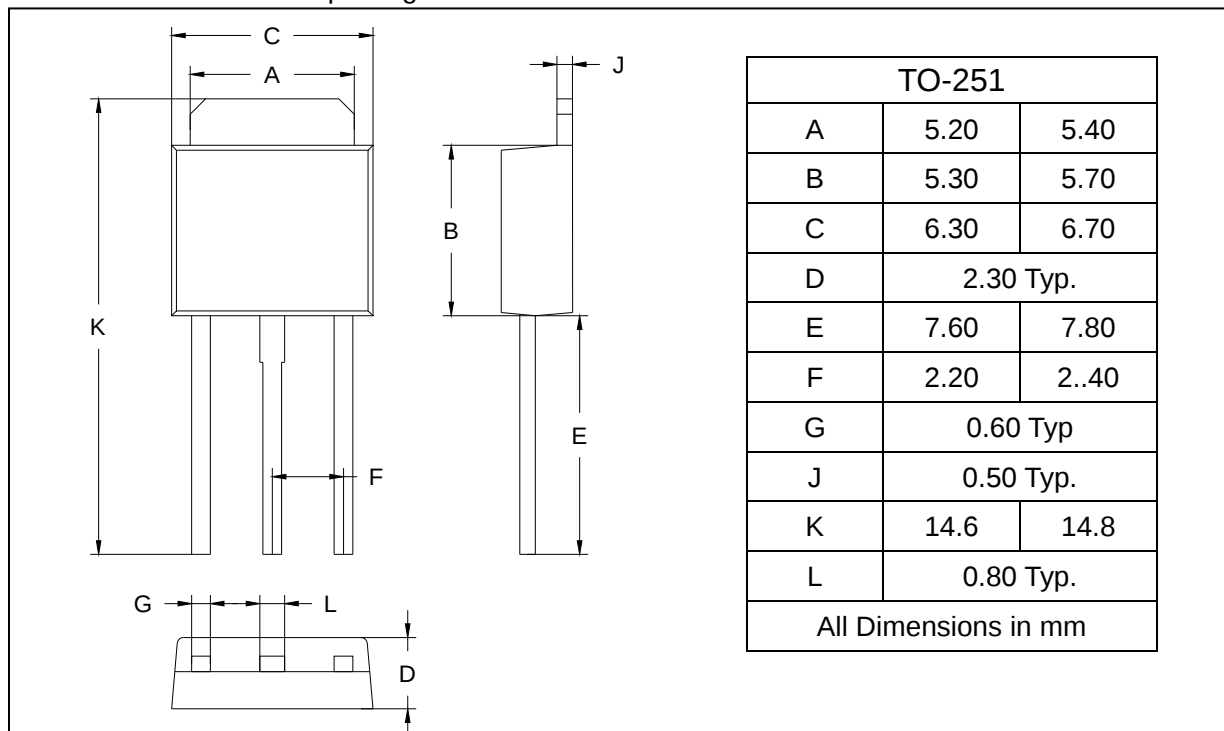
2SA1241



PACKAGE OUTLINE

Plastic surface mounted package

TO-251



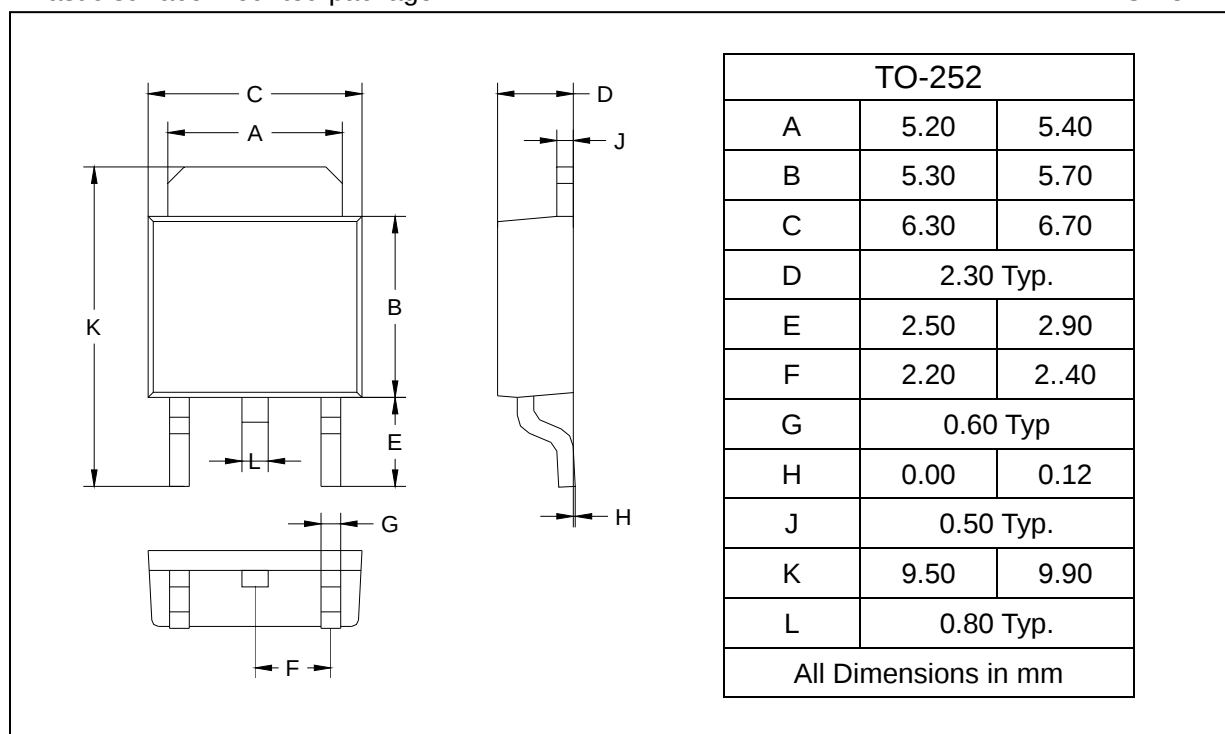
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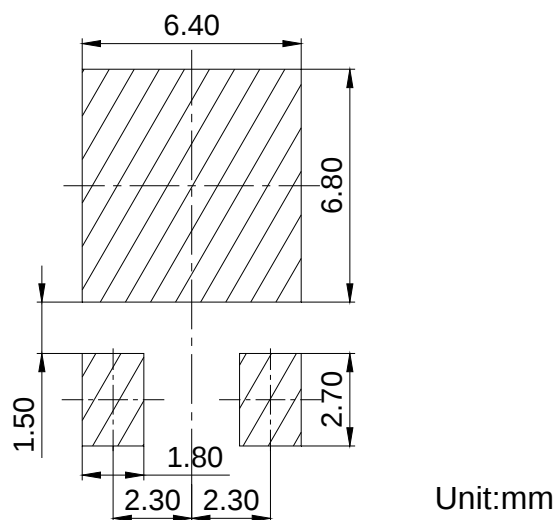
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SA1241	TO-251/252	80PCS/Tube
	TO-252	2500PCS/Tape&Reel