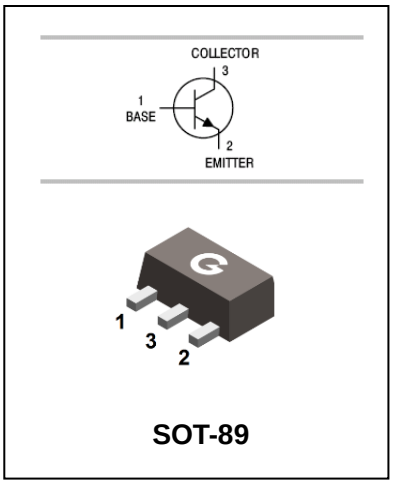
Low Frequency Transistor 2SC4672

FEATURES

- Low saturation voltage
- Excellent DC current gain characteristics
- Complements the 2SA1797

HF



SOT-89

APPLICATIONS

- Power amplifier application

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4672	DKP/DKQ/DKR	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	2	A
I_{CM}	Collector Current (Pulse)	5	A
P_D	Power Dissipation *1	0.5	W
$R_{\theta JA}$	Thermal Resistance Junction-to-Air *1	250	°C/W
P_D	Power Dissipation *2	2.1	W
$R_{\theta JA}$	Thermal Resistance Junction-to-Air *2	60	°C/W
P_D	Power Dissipation *3	2.8	W
$R_{\theta JA}$	Thermal Resistance Junction-to-Air *3	45	°C/W
P_D	Power Dissipation *4	3.1	W
$R_{\theta JA}$	Thermal Resistance Junction-to-Air *4	40	°C/W
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	°C

Low Frequency Transistor **2SC4672**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=50μA,I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=2V,I_C=0.5A	82		400	
		V_{CE}=2V,I_C=1.5A	45			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=1A, I_B=50mA		0.1	0.35	V
Transition frequency	f_T	V_{CE}=2V,I_E=0.5A, f=100MHz		210		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		25		pF

Notes:

1. The data tested by surface mounted on a minimum recommended FR-4 board
2. The data tested by surface mounted on a 300mm^2 FR-4 board with 2OZ copper
3. The data tested by surface mounted on a 1 inch^2 FR-4 board with 2OZ copper
4. The data tested by surface mounted on a 1000mm^2 FR-4 board with 2OZ copper

CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	200-400
MARKING	DKP	DKQ	DKR

Low Frequency Transistor **2SC4672**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

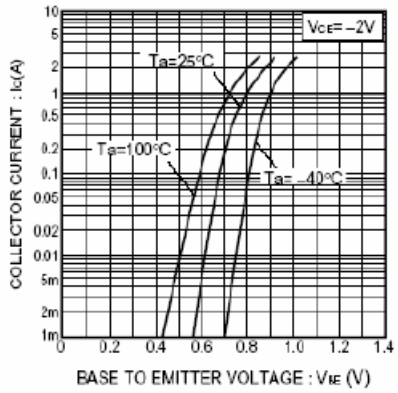


Fig.1 Grounded emitter propagation characteristics

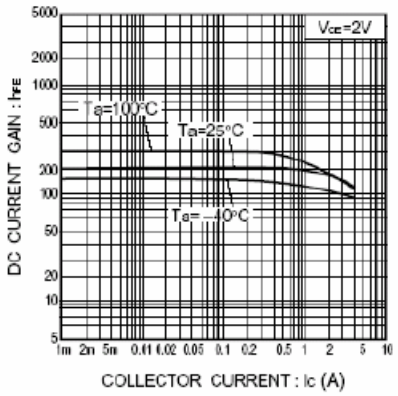


Fig.2 DC current gain vs. collector current

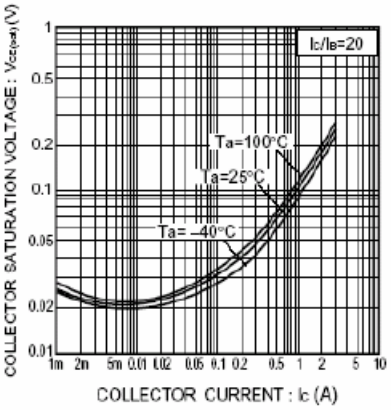


Fig.3 Collector-emitter saturation voltage vs. collector current

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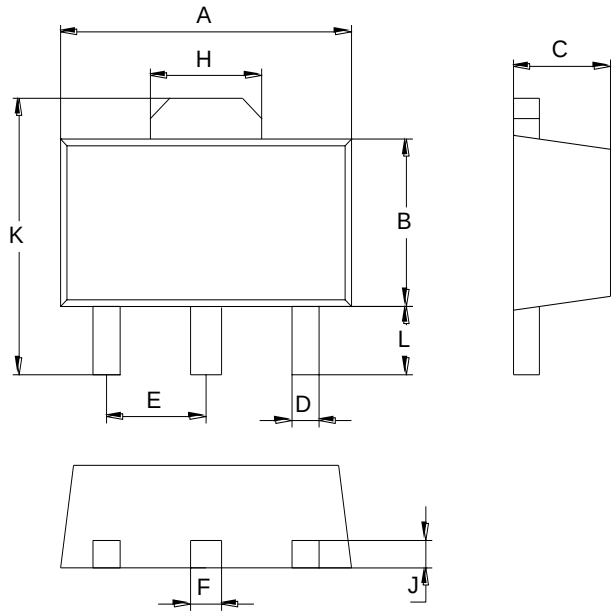
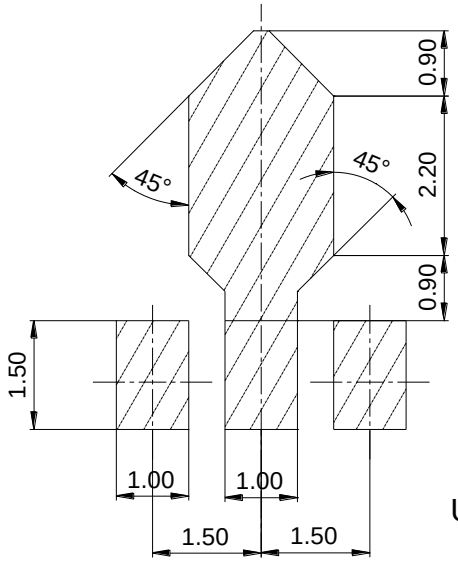
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
2SC4672	SOT-89	1000 pcs/ Tape & Reel