

M·C·C

Micro Commercial Components



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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

KSD471A-O
KSD471A-Y
KSD471A-G

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Collector Dissipation : $I_C = 1A$
- Collector Current : $P_C = 800mW$
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	1	A
P_C	Collector power dissipation	800	mW
T_J	Junction Temperature	150	$^{\circ}$ C
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}$ C

Electrical Characteristics @ 25 $^{\circ}$ C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

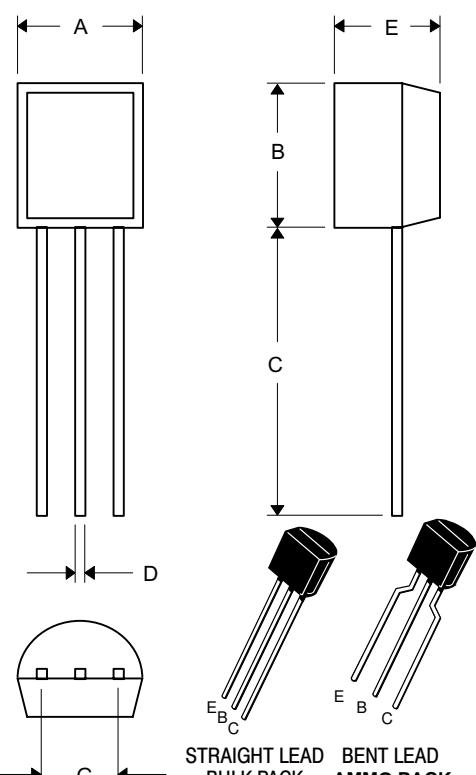
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A_{dc}$, $I_E=0$)	40	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=10mA_{dc}$, $I_E=0$)	30	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_C=100\mu A_{dc}$, $I_E=0$)	5.0	---	---	Vdc
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=30V_{dc}$, $I_E=0$)	---	---	0.1	μA_{dc}

ON CHARACTERISTICS

h_{FE}	Forward Current Transfer ratio* ($I_C=0.1A_{dc}$, $V_{CE}=1.0V_{dc}$)	70	---	400	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=1A_{dc}$, $I_E=0.1A_{dc}$)	---	---	0.5	Vdc
f_T	Transition Frequency ($V_{CE}=6V_{dc}$, $I_C=10mA_{dc}$)	---	130	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB}=6V_{dc}$, $I_E=0$, $f=1.0MHz$)	---	16	---	pF

CLASSIFICATION OF h_{FE}

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



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

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KSD471A

Typical Characteristics

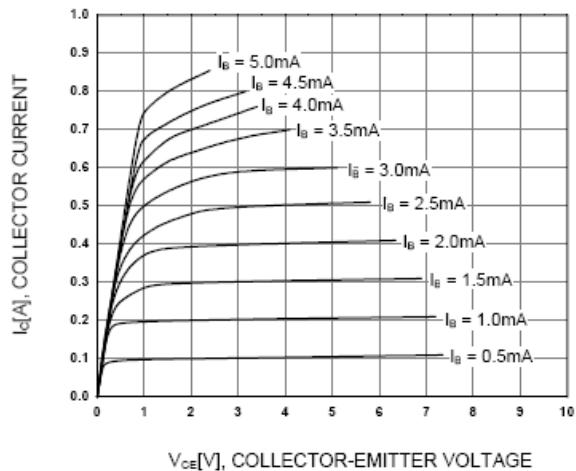


Figure 1. Static Characteristic

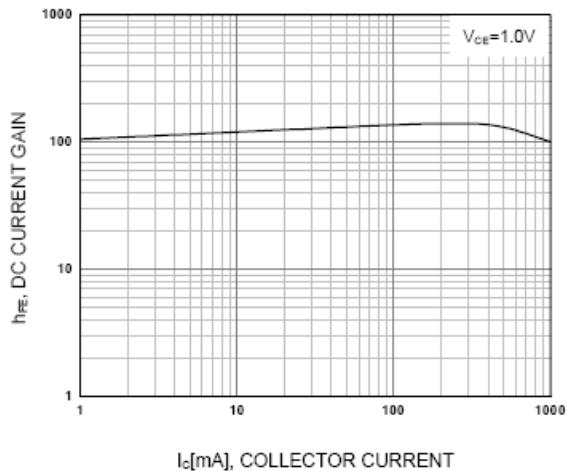


Figure 2. DC current Gain

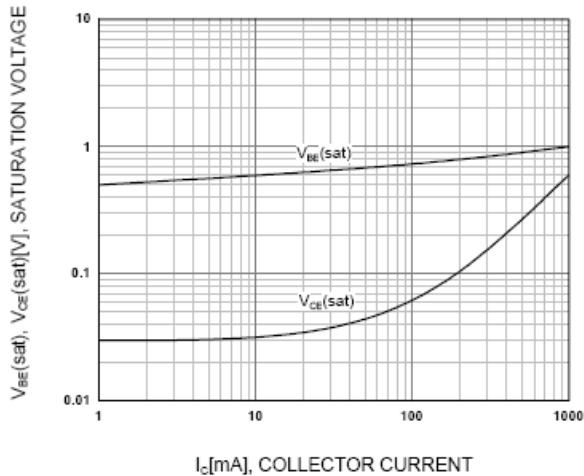


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

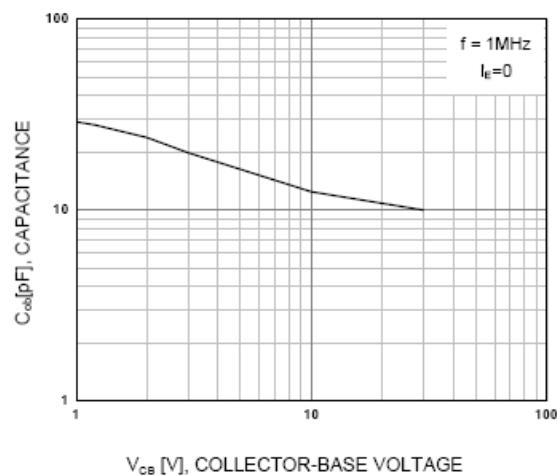


Figure 4. Collector Output Capacitance

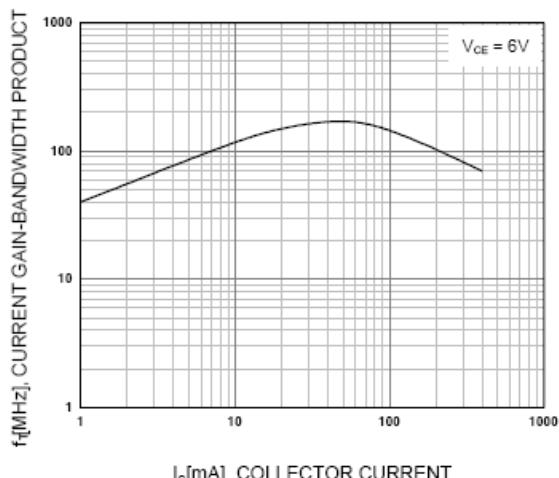


Figure 5. Current Gain Bandwidth Product

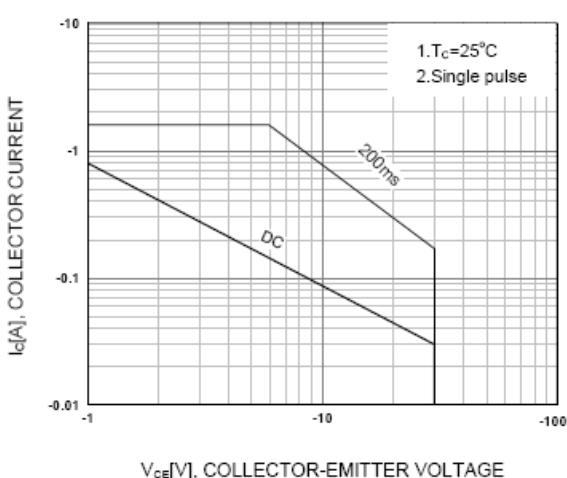


Figure 6. Safe Operating Area



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Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

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