

CMKT2907A
CMKT2907AG

SURFACE MOUNT
DUAL PNP SILICON TRANSISTORS

ULTRAmⁱⁿⁱ[™]



SOT-363 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKT2907A and CMKT2907AG each consist of two individual isolated 2907A PNP silicon transistors, manufactured by the epitaxial planar process and epoxy molded in an SOT-363 surface mount package. This ULTRAmⁱⁿⁱ[™] device has been designed for small signal general purpose and switching applications.

- The CMKT2907AG is **Halogen Free** by design.

MARKING CODES:

CMKT2907A: K07

CMKT2907AG: K7G

MAXIMUM RATINGS: (T_A=25°C)

Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	60	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Continuous Collector Current	I _C	600	mA
Power Dissipation	P _D	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	357	°C/W

SYMBOL

SYMBOL		UNITS
V _{CBO}	60	V
V _{CEO}	60	V
V _{EBO}	5.0	V
I _C	600	mA
P _D	350	mW
T _J , T _{stg}	-65 to +150	°C
θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER TRANSISTOR: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =50V		10	nA
I _{CBO}	V _{CB} =50V, T _A =125°C		10	μA
I _{CEV}	V _{CE} =30V, V _{BE} =0.5V		50	nA
BV _{CBO}	I _C =10μA	60		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10μA	5.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.4	V
V _{CE(SAT)}	I _C =500mA, I _B =50mA		1.6	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA		1.3	V
V _{BE(SAT)}	I _C =500mA, I _B =50mA		2.6	V
h _{FE}	V _{CE} =10V, I _C =0.1mA	75		
h _{FE}	V _{CE} =10V, I _C =1.0mA	100		
h _{FE}	V _{CE} =10V, I _C =10mA	100		
h _{FE}	V _{CE} =10V, I _C =150mA	100	300	
h _{FE}	V _{CE} =10V, I _C =500mA	50		

R4 (13-January 2010)

**CMKT2907A
CMKT2907AG**

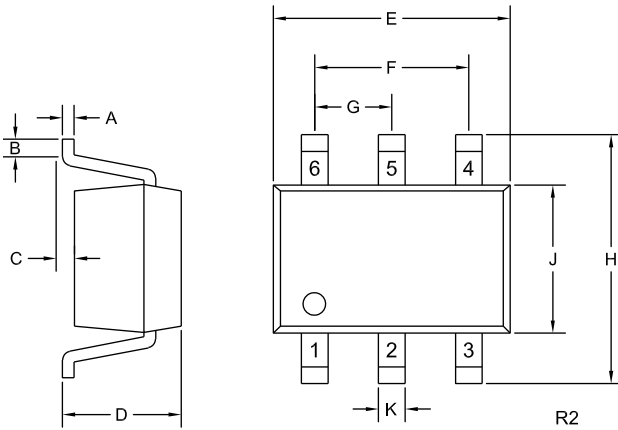
**SURFACE MOUNT
DUAL PNP SILICON TRANSISTORS**



ELECTRICAL CHARACTERISTICS PER TRANSISTOR - Continued:

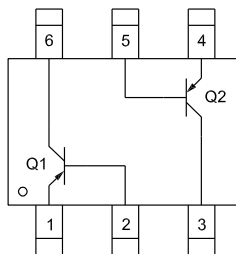
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
f_T	$V_{CE}=20V, I_C=50mA, f=100MHz$	200		MHz
C_{ob}	$V_{CB}=10V, I_E=0, f=1.0MHz$		8.0	pF
C_{ib}	$V_{BE}=2.0V, I_C=0, f=1.0MHz$		30	pF
t_{on}	$V_{CC}=30V, V_{BE}=0.5V, I_C=150mA, I_{B1}=15mA$		45	ns
t_d	$V_{CC}=30V, V_{BE}=0.5V, I_C=150mA, I_{B1}=15mA$		10	ns
t_r	$V_{CC}=30V, V_{BE}=0.5V, I_C=150mA, I_{B1}=15mA$		40	ns
t_{off}	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		100	ns
t_s	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		80	ns
t_f	$V_{CC}=6.0V, I_C=150mA, I_{B1}=I_{B2}=15mA$		30	ns

SOT-363 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	0.000	0.004	0.00	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.075	0.091	1.90	2.30
J	0.043	0.055	1.10	1.40
K	0.006	0.012	0.15	0.30

SOT-363 (REV: R2)



LEAD CODE:

- 1) Emitter Q1
- 2) Base Q1
- 3) Collector Q2
- 4) Emitter Q2
- 5) Base Q2
- 6) Collector Q1

MARKING CODES:

CMKT2907A: K07
CMKT2907AG: K7G

R4 (13-January 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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