



CMKT2907A
CMKT2907AG

ULTRAmi™
SURFACE MOUNT
DUAL PNP SILICON TRANSISTORS

ULTRAmi™



SOT-363 CASE

Central™

Semiconductor Corp.

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 ULTRAmi™ 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
Collector-Emitter Voltage
Emitter-Base Voltage
Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V _{CB0}	60
V _{CEO}	60
V _{EBO}	5.0
I _C	600
P _D	350
T _J , T _{stg}	-65 to +150
θ _{JA}	357

UNITS

V
V
V
mA
mW
°C
°C/W

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

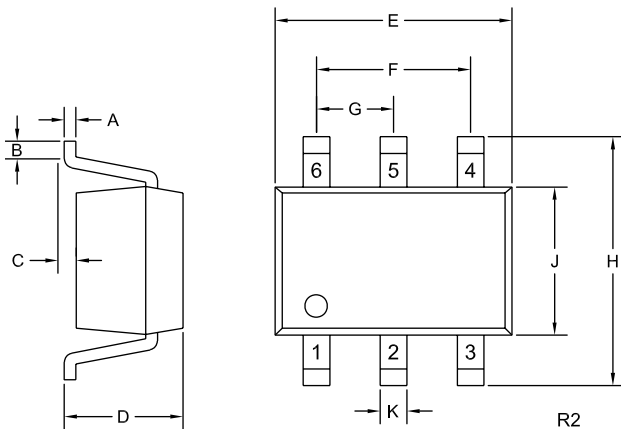
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CB0}	V _{CB} =50V		10	nA
I _{CB0}	V _{CB} =50V, T _A =125°C		10	µA
I _{CEV}	V _{CE} =30V, V _{BE} =0.5V		50	nA
BV _{CB0}	I _C =10µA	60		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10µA	5.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.4	V
V _{CE(SAT)}	I _C =500mA, 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		

R3 (5-June 2008)

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

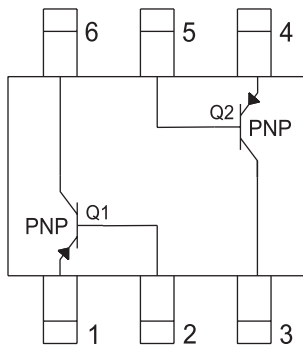
SOT-363 CASE - MECHANICAL OUTLINE



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)

PIN CONFIGURATION



LEAD CODE:

- 1) EMITTER Q1
- 2) BASE Q1
- 3) COLLECTOR Q2
- 4) EMITTER Q2
- 5) BASE Q2
- 6) COLLECTOR Q1

MARKING CODES:

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CMKT2907AG: K7G