

CMKT5078
 CMKT5087
 CMKT5088

ULTRAmi™
 SURFACE MOUNT
 SILICON TRANSISTORS

ULTRAmi™



SOT-363 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMKT5078 , CMKT5087, and CMKT5088, are Silicon transistors in an ULTRAmi™ surface mount package, designed for applications requiring high gain and low noise.

The following configurations are available:

CMKT5078 Dual, Complementary **Marking Code: K78**
CMKT5087 Dual, PNP **Marking Code: K87**
CMKT5088 Dual, NPN **Marking Code: K88**

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL	NPN	PNP	UNITS
Collector-Base Voltage	V _{CB0}	35	50	V
Collector-Emitter Voltage	V _{CEO}	30	50	V
Emitter-Base Voltage	V _{EBO}	4.5	3.0	V
Collector Current	I _C		50	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

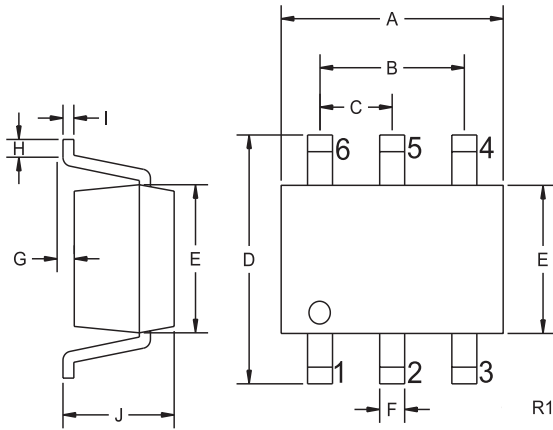
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	NPN		PNP		UNITS
		MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} =10V				10	nA
I _{CBO}	V _{CB} =35V				50	nA
I _{CBO}	V _{CB} =20V		50			nA
I _{EBO}	V _{EB} =3.0V		50			nA
BV _{CB0}	I _C =100µA	35		50		V
BV _{CEO}	I _C =1.0mA	30		50		V
BV _{EBO}	I _E =100µA	4.5		3.0		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.50		0.30	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA		0.80		0.85	V
h _{FE}	V _{CE} =5.0V, I _C =0.1mA	300	900	250	800	
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	350		250		
h _{FE}	V _{CE} =5.0V, I _C =10mA	300		250		
f _T	V _{CE} =5.0V, I _C =500µA, f=20MHz	50		40		MHz
C _{ob}	V _{CB} =5.0V, I _E =0, f=1.0MHz		4.0		4.0	pF
C _{ib}	V _{BE} =0.5V, I _C =0, f=1.0MHz		15			pF
h _{fe}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz	350	1400	250	900	
NF	V _{CE} =5.0V, I _C =100µA, R _S =10kΩ f=10Hz to 15.7kHz		3.0		2.0	dB
NF	V _{CE} =5.0V, I _C =100µA, R _S =10kΩ f=1.0kHz				2.0	dB

R0 (19-September 2001)

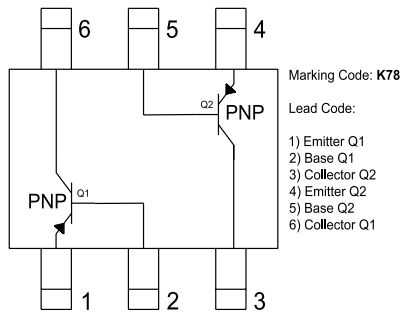
ULTRAmiTM
SURFACE MOUNT
SILICON TRANSISTORS

SOT-363 CASE - MECHANICAL OUTLINE

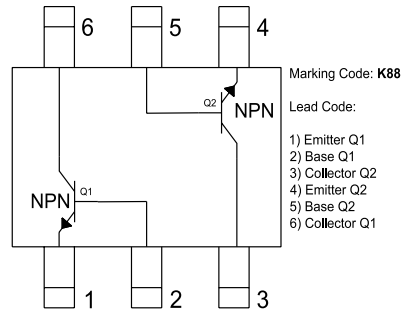


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.073	0.085	1.85	2.15
B	0.051		1.30	
C	0.026		0.65	
D	0.075	0.091	1.90	2.30
E	0.043	0.055	1.10	1.40
F	0.006	0.012	0.15	0.30
G	0.000	0.004	0.00	0.10
H	0.010	-	0.25	-
I	0.004	0.010	0.10	0.25
J	0.031	0.039	0.80	1.00

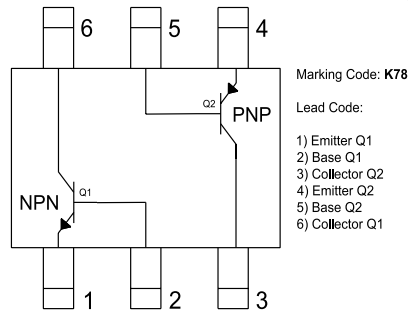
SOT-363 (REV: R1)



CMKT5087



CMKT5088



CMKT5078



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.