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2N3726
2N3727

PNP DUAL SILICON TRANSISTOR

JEDEC TO-78 CASE

2N3726, 2N3727 types are silicon PNP dual transistors manufactured by the epitaxial planar process utilizing 2 individual chips mounted in a hermetically sealed metal case designed for differential amplifier applications.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CBO}	45	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	300	mA
Base Current	I_B	100	mA
Power Dissipation (One Die)	P_D	400	mW
Power Dissipation (Both Dice)	P_D	500	mW
Power Dissipation (One Die, T_C=25°C)	P_D	850	mW
Power Dissipation (Both Dice, T_C=25°C)	P_D	1400	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 to +200	°C
Collector 1 to Collector 2 Voltage (Voltage Rated From Any Lead to the Case)	V_{C1}, V_{C2}	±200	V

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	V_{CB}=30V		10	nA
I_{CBO}	V_{CB}=30V, T_A=150°C		10	µA
I_{EBO}	V_{BE}=3.0V		0.1	µA
BV_{CBO}	I_C=10µA	45		V
BV_{CEO}	I_C=10mA	45		V
BV_{EBO}	I_E=10µA	5.0		V
$V_{CE(SAT)}$	I_C=50mA, I_B=2.5mA		0.25	V
$V_{BE(SAT)}$	I_C=50mA, I_B=2.5mA		1.0	V
h_{FE}	V_{CE}=5.0V, I_C=10µA	80	-	
h_{FE}	V_{CE}=5.0V, I_C=100µA	120	-	
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	135	350	
h_{FE}	V_{CE}=5.0V, I_C=50mA	115	-	
h_{fe}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz	135	420	
f_T	V_{CE}=10V, I_C=1.0mA, f=20MHz	60	-	MHz
f_T	V_{CE}=20V, I_C=50mA, f=100MHz	200	600	MHz
h_{ie}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz	-	11.5	kΩ
h_{re}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz	-	1500	X10-6
h_{oe}	V_{CE}=10V, I_C=1.0mA, f=1.0kHz		80	µmhos
C_{ib}	V_{EB}=0.5V, I_C=0, f=1.0MHz		30	pF
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		8.0	pF
NF	V_{CE}=5.0V, I_C=30µA, R_S=10kΩ, f=1.0kHz, BW=200Hz		4.0	dB

MATCHING CHARACTERISTICS:

		MIN	MAX
$\lvert V_{BE1}-V_{BE2}\rvert$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA (2N3726)		5.0
$\lvert V_{BE1}-V_{BE2}\rvert$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA (2N3727)		2.5
$\Delta(V_{BE1}-V_{BE2})$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA, T_A=-55°C to +25°C (2N3726)		1.6
$\Delta(V_{BE1}-V_{BE2})$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA, T_A=-55°C to +25°C (2N3727)		0.8
$\Delta(V_{BE1}-V_{BE2})$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA, T_A=+25°C to +125°C (2N3726)		2.0
$\Delta(V_{BE1}-V_{BE2})$	V_{CE}=5.0V, I_C=0.1mA to 1.0mA, T_A=+25°C to +125°C (2N3727)		1.0
h_{FE1}/h_{FE2}	V_{CE}=5.0V, I_C=0.1 to 1.0mA	0.9	1.0