PNP DUAL SILICON TRANSISTOR

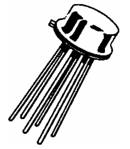
Qualified per MIL-PRF-19500/496

Devices		Qualified Level
2N5795	**2N5796** **2N5796U**	**JAN** **JANTX** **JANTXV**

MAXIMUM RATINGS

Ratings	Symbol	Value		Units
Collector-Emitter Voltage	V_{CEO}	60		Vdc
Collector-Base Voltage	V_{CBO}	60		Vdc
Emitter-Base Voltage	V_{EBO}	5.0		Vdc
Collector Current	I_C	600		mAdc
		One$^{(1)}$ Section	**Both$^{(2)}$ Sections**	
Total Power Dissipation @ $T_A = +25^0C$	P_T	0.5	0.6	W
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +175		^0C

1) Derate linearly 2.86 mW/^0C for $T_A \geq +25^0C$
2) Derate linearly 3.43 mW/^0C for $T_A \geq +25^0C$



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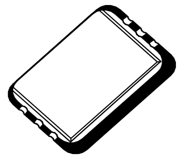

6 PIN SURFACE MOUNT*

*See MILPRF19500/496 for package outline

ELECTRICAL CHARACTERISTICS ($T_A = 25^0C$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS				
Collector-Emitter Breakdown Voltage $I_C = 10$ mAdc	$V_{(BR)CEO}$	60		Vdc
Collector-Base Cutoff Current $V_{CB} = 50$ Vdc $V_{CBO} = 60$ Vdc	I_{CBO}		10 10	ηAdc µAdc
Emitter-Base Cutoff Current $V_{EB} = 3.0$ Vdc $V_{EB} = 5.0$ Vdc	I_{EBO}		100 10	ηAdc µAdc

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS (1)				
Forward-Current Transfer Ratio				
I_C = 100 μAdc, V_{CE} = 10 Vdc 2N5795	h_{FE}	40		
I_C = 1.0 mAdc, V_{CE} = 10 Vdc		40		
I_C = 10 mAdc, V_{CE} = 10 Vdc		40		
I_C = 150 mAdc, V_{CE} = 10 Vdc		40	150	
I_C = 300 mAdc, V_{CE} = 10 Vdc		20		
I_C = 150 mAdc, V_{CE} = 1.0 Vdc		20		
I_C = 100 μAdc, V_{CE} = 10 Vdc 2N5796	h_{FE}	75		
I_C = 1.0 mAdc, V_{CE} = 10 Vdc 2N5796U		100		
I_C = 10 mAdc, V_{CE} = 10 Vdc		100		
I_C = 150 mAdc, V_{CE} = 10 Vdc		100	300	
I_C = 300 mAdc, V_{CE} = 10 Vdc		50		
I_C = 150 mAdc, V_{CE} = 1.0 Vdc		50		
Collector-Emitter Saturation Voltage I_C = 150 mAdc, I_B = 15 mAdc I_C = 500 mAdc, I_B = 50 mAdc	$V_{CE(sat)}$		0.4 1.6	Vdc
Base-Emitter Saturation Voltage I_C = 150 mAdc, I_B = 15 mAdc I_C = 500 mAdc, I_B = 50 mAdc	$V_{BE(sat)}$		1.3 2.6	Vdc
DYNAMIC CHARACTERISTICS				
Magnitude of Small-Signal Forward Current Transfer Ratio I_C = 20 mAdc, V_{CE} = 20 Vdc, f = 100 MHz	$\lvert h_{fe} \rvert$	2.0	10	
Output Capacitance V_{CB} = 10 Vdc, I_E = 0, 100 kHz ≤ f ≤ 1.0 MHz	C_{obo}		8.0	pF
Input Capacitance V_{EB} = 2.0 Vdc, I_C = 0, 100 kHz ≤ f ≤ 1.0 MHz	C_{ibo}		25	pF
SWITCHING CHARACTERISTICS				
Turn-On Time V_{CC} = 30 Vdc; I_C = 150 mAdc; I_{B1}= 15 mAdc	^{t}on		50	ηs
Turn-Off Time V_{CC} = 30 Vdc; I_C = 150 mAdc; I_{B1} = I_{B2} = 15 mAdc	^{t}off		140	ηs

1) Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.