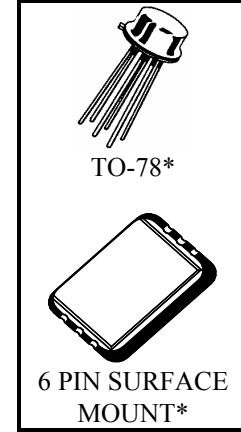


PNP DUAL SILICON TRANSISTOR
Qualified per MIL-PRF-19500/496
Devices
2N5795
**2N5796
2N5796U**
Qualified Level
**JAN
JANTX
JANTXV**
MAXIMUM RATINGS

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°C	P _T	0.5	0.6	W
Operating & Storage Junction Temperature Range	T _J , T _{stg}	-65 to +175		°C

 1) Derate linearly 2.86 mW/°C for T_A ≥ +25°C

 2) Derate linearly 3.43 mW/°C for T_A ≥ +25°C


*See
MILPRF19500/496 for
package outline

ELECTRICAL CHARACTERISTICS (T_A = 25°C 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	100 10	μAdc μAdc
Emitter-Base Cutoff Current V _{EB} = 3.0 Vdc V _{EB} = 5.0 Vdc	I _{EBO}			ηAdc μAdc

2N5795, 2N5796 JAN SERIES

ELECTRICAL CHARACTERISTICS (con't)

Characteristics	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS (1)				
Forward-Current Transfer Ratio $I_C = 100 \mu\text{Adc}, V_{CE} = 10 \text{ Vdc}$	2N5795	40		
$I_C = 1.0 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		40		
$I_C = 10 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		40		
$I_C = 150 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		40		
$I_C = 300 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		20		
$I_C = 150 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$		20		
 $I_C = 100 \mu\text{Adc}, V_{CE} = 10 \text{ Vdc}$	2N5796	75		
$I_C = 1.0 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$	2N5796U	100		
$I_C = 10 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		100		
$I_C = 150 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		100		
$I_C = 300 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$		50		
$I_C = 150 \text{ mAdc}, V_{CE} = 1.0 \text{ Vdc}$		50		
Collector-Emitter Saturation Voltage $I_C = 150 \text{ mAdc}, I_B = 15 \text{ mAdc}$	$V_{CE(\text{sat})}$		0.4	Vdc
$I_C = 500 \text{ mAdc}, I_B = 50 \text{ mAdc}$			1.6	
Base-Emitter Saturation Voltage $I_C = 150 \text{ mAdc}, I_B = 15 \text{ mAdc}$	$V_{BE(\text{sat})}$		1.3	Vdc
$I_C = 500 \text{ mAdc}, I_B = 50 \text{ mAdc}$			2.6	

DYNAMIC CHARACTERISTICS

Magnitude of Small-Signal Forward Current Transfer Ratio $I_C = 20 \text{ mAdc}, V_{CE} = 20 \text{ Vdc}, f = 100 \text{ MHz}$	$ h_{fe} $	2.0	10	
Output Capacitance $V_{CB} = 10 \text{ Vdc}, I_E = 0, 100 \text{ kHz} \leq f \leq 1.0 \text{ MHz}$	C_{obo}		8.0	pF
Input Capacitance $V_{EB} = 2.0 \text{ Vdc}, I_C = 0, 100 \text{ kHz} \leq f \leq 1.0 \text{ MHz}$	C_{ibo}		25	pF

SWITCHING CHARACTERISTICS

Turn-On Time $V_{CC} = 30 \text{ Vdc}; I_C = 150 \text{ mAdc}; I_{B1} = 15 \text{ mAdc}$	t_{on}		50	μs
Turn-Off Time $V_{CC} = 30 \text{ Vdc}; I_C = 150 \text{ mAdc}; I_{B1} = I_{B2} = 15 \text{ mAdc}$	t_{off}		140	μs

1) Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.