NEW ENGLAND SEMICONDUCTOR

2N3789
2N3790
2N3791*
2N3792*

*also available as JAN, JANTX, JANTXV

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

Characteristics		Symbol	Min	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Sustaining Voltage (1)					
I_C = 200 mAdc, I_B = 0	2N3789, 2N3791	$V_{CEO(sus)}$	60		Vdc
	2N3790, 2N3792		80		
Collector-Emitter Cutoff Current					
V_{CE} = 60 Vdc, V_{BE} = -1.5 Vdc	2N3789, 2N3791			1.0	
V_{CE} = 80 Vdc, V_{BE} = -1.5 Vdc	2N3790, 2N3792	I_{CEX}		1.0	mAdc
V_{CE} = 60 Vdc, V_{BE} = -1.5 Vdc, T_C =150°C	2N3789, 2N3791			5.0	
V_{CE} = 80 Vdc, V_{BE} = -1.5 Vdc, T_C =150°C	2N3790, 2N3792			5.0	
Emitter-Base Cutoff Current					
V_{EB} = 7.0 Vdc	All Types	I_{EBO}		5.0	mAdc
ON CHARACTERISTICS					
DC Current Gain (1)					
I_C = 1.0 Adc, V_{CE} = 2.0 Vdc	2N3789, 2N3790	h_{FE}	25	90	
	2N3791, 2N3792		50	180	-
I_C = 3.0 Adc, V_{CE} = 2.0 Vdc	2N3789, 2N3790		15	-	
	2N3791, 2N3792		30	-	
Collector-Emitter Saturation Voltage (1)					
I_C = 4.0 Adc, I_B = 0.4 Adc	2N3789, 2N3790	$V_{CE(sat)}$		1.0	Vdc
I_C = 5.0 Adc, I_B = 0.5 Adc	2N3791, 2N3792			1.0	
Base-Emitter On Voltage (1)					
I_C = 5.0 Adc, V_{CE} = 2.0 Vdc	2N3789, 2N3790	$V_{BE(on)}$		2.0	Vdc
	2N3791, 2N3792			1.8	
I_C = 10 Adc, V_{CE} = 4.0 Vdc	All Types			4.0	
DYNAMIC CHARACTERISTICS					
Current Gain -- Bandwidth Product					
V_{CE} = 10 Vdc, I_C = 0.5 Adc, f = 1.0 MHz	All Types	f_T	4.0		MHz

(1)SweepTest: 1/2 Sine Wave Cycle @ 60 cps.

SX LEVEL RELIABILITY TESTING

100% SCREENING	GROUP A	GROUP B (Sample)	GROUP C (Sample)
Internal Visual	Visual and Mechanical	Solderability	Physical Dimensions
Temp Cycle	DC Static Tests 25°C	Temp Cycle	Thermal Shock
Thermal Response	DC Static Tests High Temp	Fine and Gross Leak	Terminal Strength
Constant Acceleration	DC Static Tests Low Temp	Bond Strength	Hermetic Seal
PIND	Dynamic Tests @ 25°C	Intermittent Op Life	Moisture Resistance
Fine and Gross Leak		Steady State Op Life	Shock Test
HTRB		Thermal Resistance	Vibration Test
Power Burn In		Hi-Temp (non-operating)	Constant Acceleration
			Salt Atmosphere
			Operation Life

NEW ENGLAND SEMICONDUCTOR
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