

MNLM195-K REV 0BL

 Original Creation Date: 08/15/95
 Last Update Date: 12/15/98
 Last Major Revision Date: 08/15/95

ULTRA RELIABLE POWER TRANSISTOR
Industry Part Number

LM195

NS Part Numbers

LM195K/883*

Prime Die

LM195K

Controlling Document

5962-8777801YA*

Processing

MIL-STD-883, Method 5004

Quality Conformance Inspection

MIL-STD-883, Method 5005

Subgrp	Description	Temp (°C)
1	Static tests at	+25
2	Static tests at	+125
3	Static tests at	-55
4	Dynamic tests at	+25
5	Dynamic tests at	+125
6	Dynamic tests at	-55
7	Functional tests at	+25
8A	Functional tests at	+125
8B	Functional tests at	-55
9	Switching tests at	+25
10	Switching tests at	+125
11	Switching tests at	-55

Electrical Characteristics

DC PARAMETERS

SYMBOL	PARAMETER	CONDITIONS	NOTES	PIN-NAME	MIN	MAX	UNIT	SUB-GROUPS
Vce	Collector to Emitter Operating Voltage		1			42	V	1, 2, 3
Bvbe	Base to Emitter Breakdown Voltage	Vce = 42V	1		42		V	1, 2, 3
Isc	Collector Current	Vce = 15V			1.2		A	1, 2, 3
Vsat	Saturation Voltage	Ic = 1A				2	V	1, 2
						2.5	V	3
Ib	Base Current	Vbe = 0V, Vce = 42V			-5		uA	1, 2, 3
		Vbe = 42V, Vce = 0V				5	uA	1, 2, 3
Iq	Quiescent Current	Vce = 42V, Vbe = 0V				5	mA	1, 2, 3
Vbk	Breakdown Delta Vbe	Vc = 46-42V, I1 = 50mA			-0.03	0.01	V	1
		Vc = 46-38V			-0.03	0.01	V	1
		Vc = 50-42V			-0.03	0.01	V	1
Thr	Thermal Response	100uS			-10	100	mV	1
		500uS			-10	70	mV	1
		2mS			-10	30	mV	1
		20mS			-10	10	mV	1

AC PARAMETERS

tON	Response Time	Vin = 0-2V, R1 = 36 Ohms, V+ = 36V				1.8	uS	9, 10, 11
tOFF	Response Time	Vin = 2-0V, R1 = 36 Ohms, V+ = 36V				1.8	uS	9, 10, 11

Note 1: Parameter tested go-no-go only.

Revision History

Rev	ECN #	Rel Date	Originator	Changes
0BL	M0001693	12/15/98	Barbara Lopez	Changed: MNLM195-K Rev. 0AL to MNLM195-K Rev. 0BL.