

**LB1213M****General-Purpose Transistor Array****Overview**

The LB1213M is a general-purpose transistor array containing 7 channels. It is especially suited for driving LEDs, lamps, small-sized relays, etc.

**Features**

- Common-emitter 7 channels.
- Built-in base current limiting resistors.
- Capable of being direct driven with TTL, CMOS, PMOS, etc.
- Wide operating voltage and temperature ranges
- Miniflat package permitting sets to be small-sized.

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

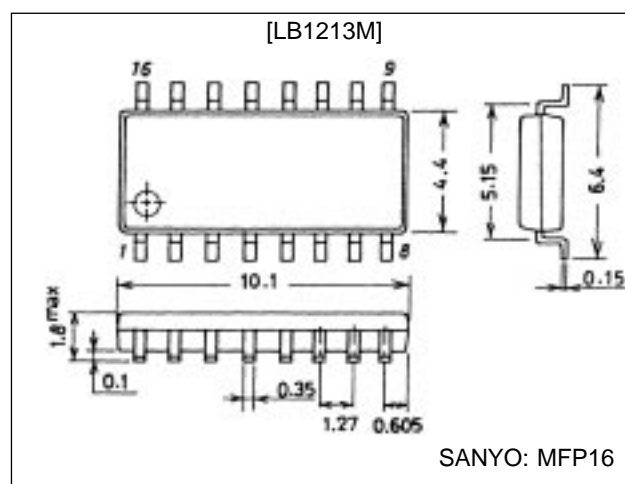
Parameter	Symbol	Conditions	Rating	Unit
Output supply voltage	$V_{OUT}$		20	V
Output current	$I_{OUT}$	Per unit	100	mA
Input supply voltage	$V_{IN}$		10	V
Allowable power dissipation	$P_d \text{ max}$		330	mW
Operating temperature	$T_{opr}$		-20 to +75	°C
Storage temperature	$T_{stg}$		-40 to +125	°C

**Electrical Characteristics at Ta = 25°C**

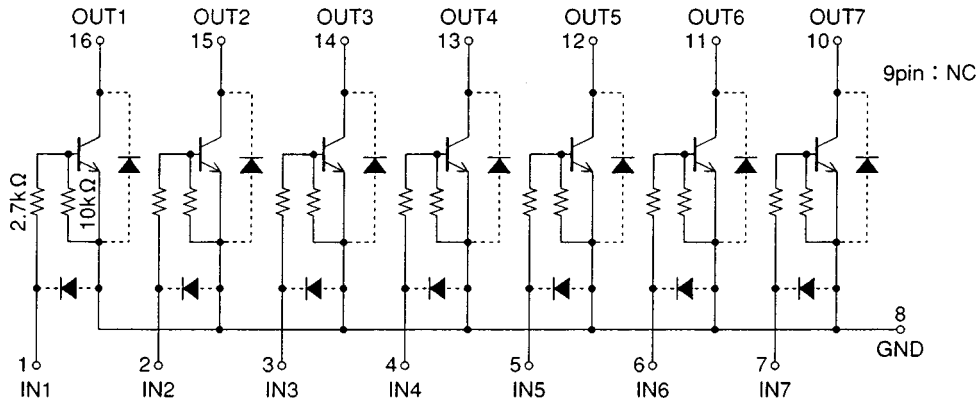
Parameter	Symbol	Conditions	min	typ	max	Unit
Output voltage	$V_{OUT 1}$	$V_{IN} = 5 \text{ V}, I_{OUT} = 5 \text{ mA}$			0.1	V
	$V_{OUT 2}$	$V_{IN} = 5 \text{ V}, I_{OUT} = 50 \text{ mA}$			0.5	V
Input current	$I_{IN}$	$V_{IN} = 5 \text{ V}$		1.6	2.3	mA
Output sustain voltage	$V_{O(SUS)}$	$I_{OUT} = 50 \text{ mA}$	20			V
Output leakage current	$I_{OFF}$	$V_{IN} = 0 \text{ V}, V_{OUT} = 20 \text{ V}$			10	μA
DC current amplification factor	$h_{FE}$	$V_{OUT} = 10 \text{ V}, I_{OUT} = 2 \text{ mA}$	50		500	

**Package Dimensions**

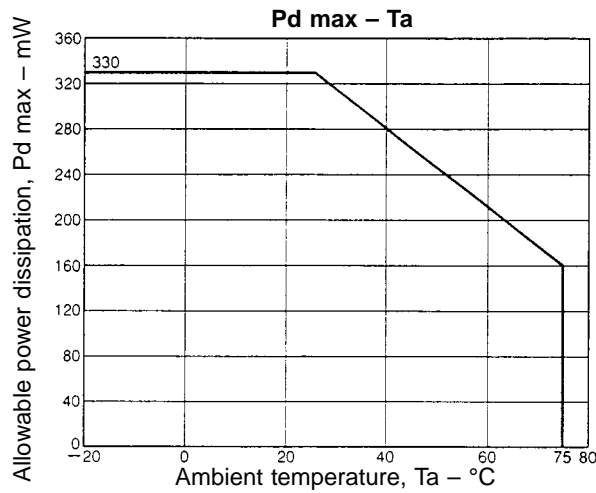
unit : mm

**3035A-MFP16**

Equivalent Circuit



A09236



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