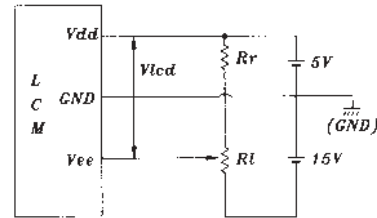
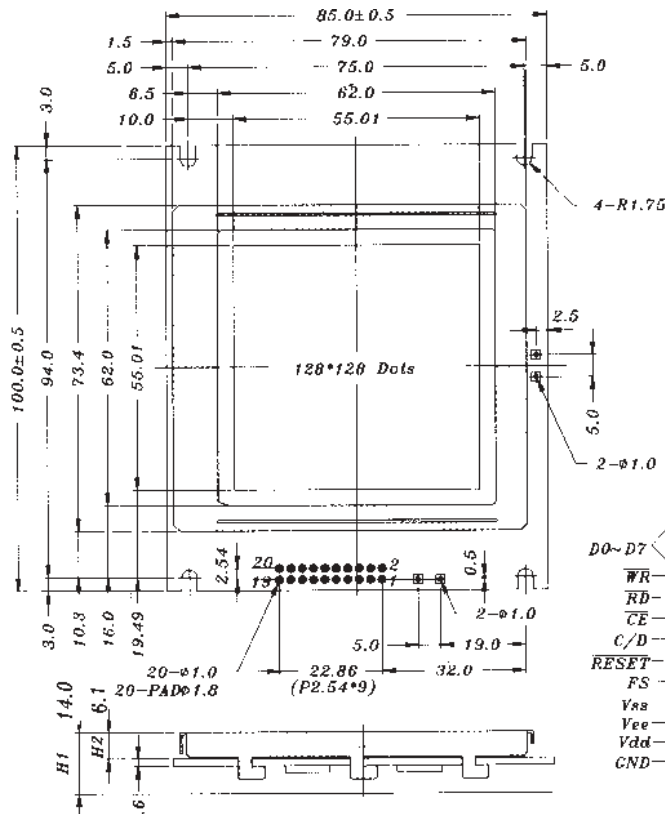
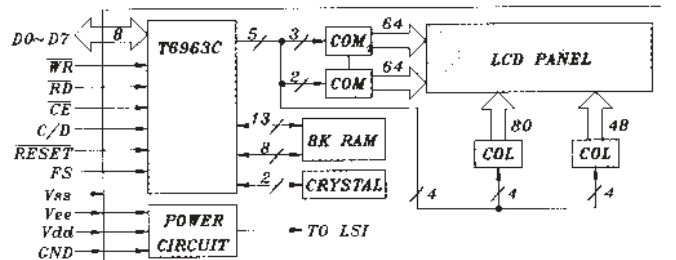
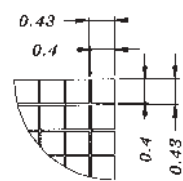


## LCD GRAFIK MODUL 128X128 & EL-BEL MIT KONTROLLER T6963C



( $R_r + R_l = 10 \sim 20K\Omega$ )  
POWER SUPPLY



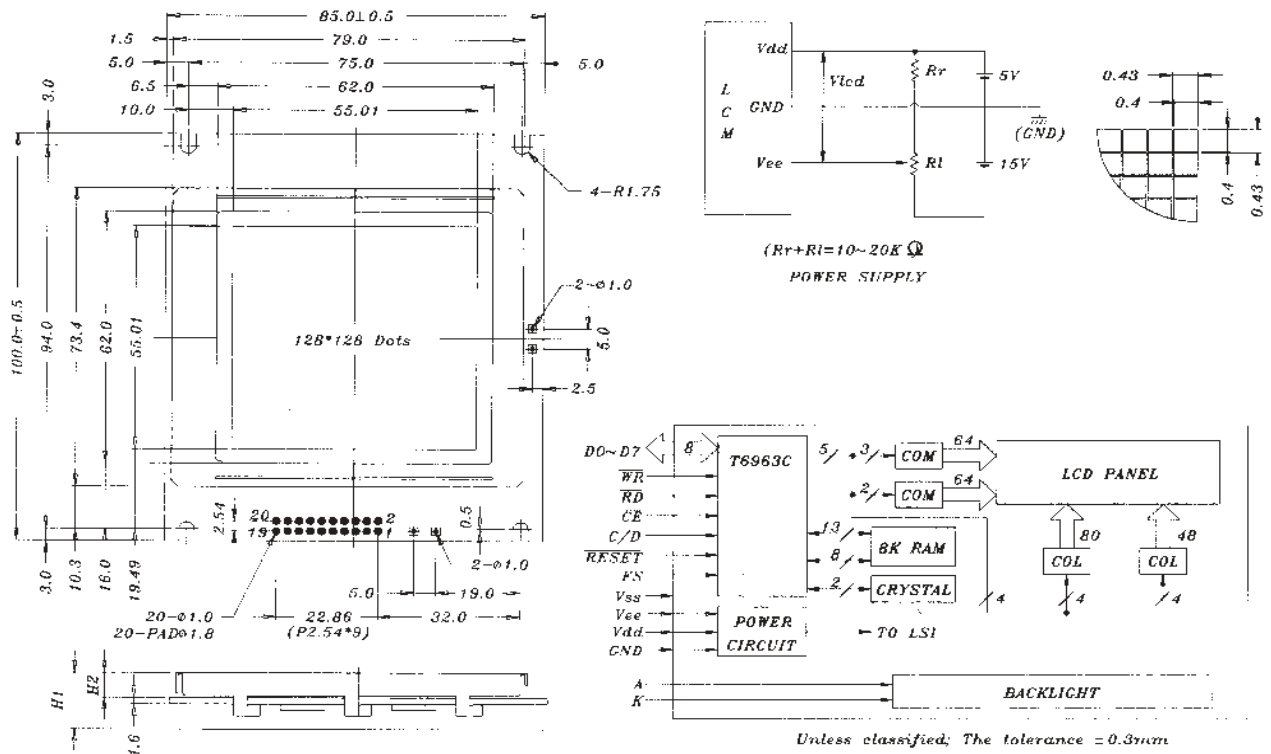
Unless classified; The tolerance  $\pm 0.3mm$

### PIN ASSIGNMENT      ABSOLUTE MAXIMUM RATING

Pin no.	Symbol	Function	Item	Symbol	Condition	Min.		Typ.		Max.		Unit	
						N	W	N	W	N	W		
1	FGND	Frame ground	Supply for LCD driver	Vdd-Vo	Ta=-20°C	-	-	-	-	-	-	V	
2	GND	Power supply (GND)			Ta=0°C	19.5	-	20.5	-	21.5	-	V	
3	Vdd	Power supply (+5V)			Ta=25°C	18.1	-	19.1	-	20.1	-	V	
4	Vee	Power supply for LCD driver			Ta=50°C	17.3	-	18.3	-	19.3	-	V	
5	WR	Data write			Ta=70°C	-	-	-	-	-	-	V	
6	RD	Data read			Supply for logic	Vdd-Vss	Ta=25°C	4.5	5.0	5.5			V
7	CE	Chip enable					Operation Temp.	Top	-	N 0	25	50	
8	C/D	Command / data read / write			-	W -20			25	70			
9	NC	No connection	Storage Temp.	Tstg	-	N -20	25	60		°C			
10	RESET	Controller reset			-	W -30	25	80					
11-18	DO-D7	Data bus line											
19	FS	Font selection											
20	NC	No connection											

# EA P128-7KLED

## LCD GRAFIK 128X128 LED-BEL. MITT6963C



Number of dots	128 x 128	Overall size	85.0 x 100.0	Module	H2 / H1
Duty	1/128	View area	62.0 x 62.0	W/O B/L	6.1 / 14.0 MAX
BIAS	1/12	Dot size	0.40 x 0.40	EL B/L	6.1 / 14.0 MAX
Type	Positive/Negative	Dot pitch	0.43 x 0.43	LED B/L	9.2 / 14.0 MAX

### PIN ASSIGNMENT

### ABSOLUTE MAXIMUM RATING

Pin no.	Symbol	Function	Item	Symbol	Condition	Min.		Typ.		Max.		Unit
						N	W	N	W	N	W	
1	FCND	Frame ground	Supply for LCD driver Note: N:Nor. Temp. W:Wide Temp.	Vdd-Vo	Ta=-20°C	-	-	-	-	-	-	V
2	GND	Power supply (GND)			Ta=0°C	19.5	-	20.5	-	21.5	-	V
3	Vdd	Power supply (+5V)			Ta=25°C	18.1	-	19.1	-	20.1	-	V
4	Vee	Power supply for LCD driver			Ta=50°C	17.3	-	18.3	-	19.3	-	V
5	WR	Data write			Ta=70°C	-	-	-	-	-	-	V
6	RD	Data read										
7	CE	Chip enable										
8	C/D	Command / data read / write	Supply for logic	Vdd-Vss	Ta=25°C	4.5		5.0		5.5	V	
9	NC	No connection	Operation Temp.	Top			N	0	25	50	°C	
							W	-20	25	70		
10	RESET	Controller reset	Storage Temp.	Tstg			N	-20	25	60	°C	
							W	-30	25	80		
11-18	D0-D7	Data bus line	LED current consumption	If	Ta=25°C	-		500		1250	mA	
19	FS	Font selection	LED B/L brightness	Iv	Ta=25°C If= 96mA	-		100		-	cd/cm <sup>2</sup>	
20	NC	No connection										