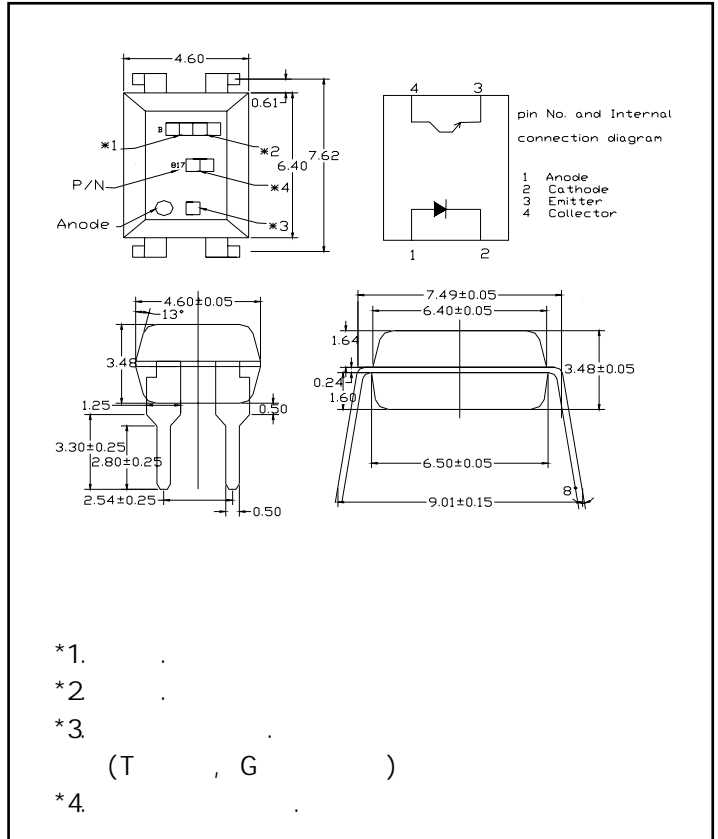


1. (CTR: .50% $I_F=5mA$, $V_{CE}=5V$)
 2. ($V_{ISO}=5,000Vrms$)
 3. (tr: TYP. 4 μs $V_{CE}=2V$, $I_C=2mA$, $R_L=100$)
 4. UL (.E236324)
 5. CSA (.218896)
 6. VDE (.40007240)
 7. TUV (.R50029014)



1. BPC-817 NPN GaAs
 2. BPC-817 BIN 2.54mm

1.
2.
3.
4.
5.

(=25)

		I_F	50	mA
		V_R	6	V
		P	70	mW
		V_{CEO}	35	V
		V_{ECO}	6	
		I_C	50	mA
		P_C	150	mW
		P_{tot}	200	mW
	*1	V_{iso}	5,000	Vrms
		V_{IOTM}	6,000	V
		V_{IORM}	630	V
		T_{opr}	-30 to + 100	
		T_{stg}	-55 to + 125	
	*2	T_{sol}	260	

*1. =40~60%

- (1)
(2)
(3)

*2. 10

($\theta_{JA} = 25$)

		V_F	$I_F=20\text{mA}$	---	1.2	1.4	V
		I_R	$V_R=4\text{V}$	---	---	10	μA
		C_t	$V=0, f=1\text{KHz}$	---	30	250	pF
		I_{CEO}	$V_{CE}=20\text{V}, I_F=0$	---	---	100	nA
		BV_{CEO}	$I_C=0.1\text{mA}$ $I_F=0$	35	---	---	V
		BV_{ECO}	$I_E=10\mu\text{A}$ $I_F=0$	6	---	---	V
		I_C	$I_F=5\text{mA}$	2.5	---	30	mA
	*1	CTR	$V_{CE}=5\text{V}$	50	---	600	%
		$V_{CE(sat)}$	$I_F=20\text{mA}$ $I_C=1\text{mA}$	---	0.1	0.2	V
		R_{iso}	DC500V 40~60%R.H.	5×10^{10}	1×10^{11}	---	
		C_f	$V=0, f=1\text{MHz}$	---	0.6	1	pF
		f_c	$V_{CE}=5\text{V},$ $I_C=2\text{mA}$ $R_L=100 \Omega,$ -3dB	---	80	---	kHz
		t_r	$V_{CE}=2\text{V},$ $I_C=2\text{mA}$	---	4	18	μs
		t_f	$R_L=100 \Omega$	---	3	18	μs

*1 $\text{CTR} = I_C / I_F \times 100\%$

	$\theta_{JA} = 25$ (%)	$\theta_{JA} = 50$ (%)
L	50	100
A	80	160
B	130	260
C	200	400
D	300	600
L or A or B or C or D	50	600

Fig.1 Forward Current vs. Ambient Temperature

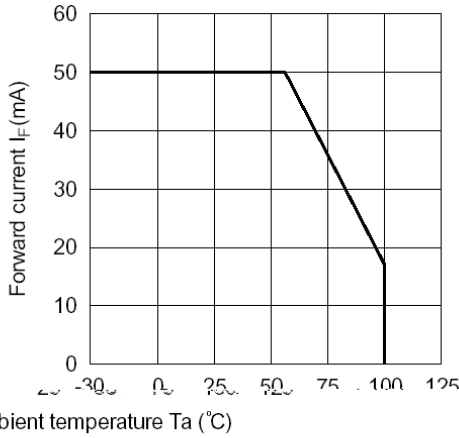


Fig.2 Collector Power Dissipation vs. Ambient Temperature

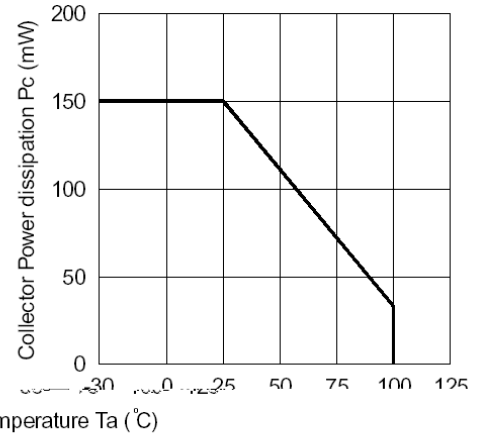


Fig.4 Forward Current vs. Forward Voltage

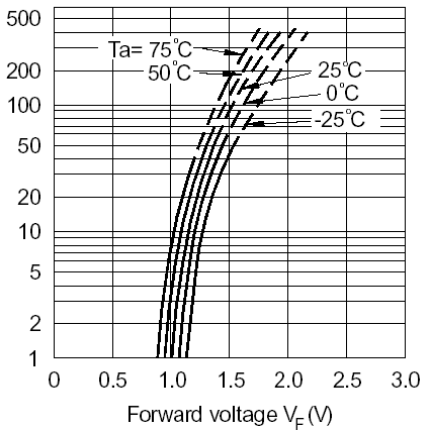


Fig.3 Collector-emitter Saturation Voltage vs. Forward Current

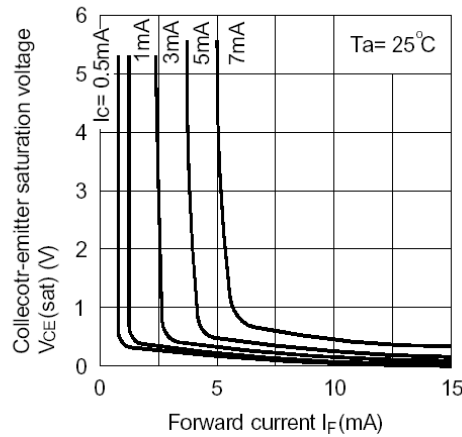


Fig.4 F

Forward current I_F (mA)

Fig.6 Collector Current vs. Collector-emitter Voltage

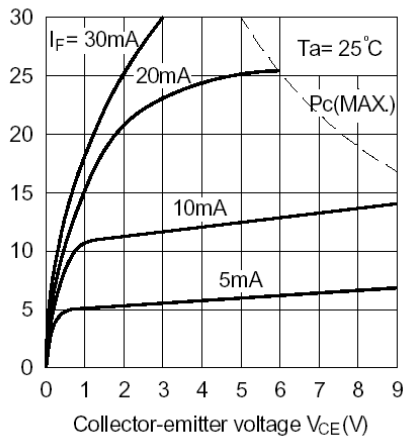


Fig.5 Current Transfer Ratio vs. Forward Current

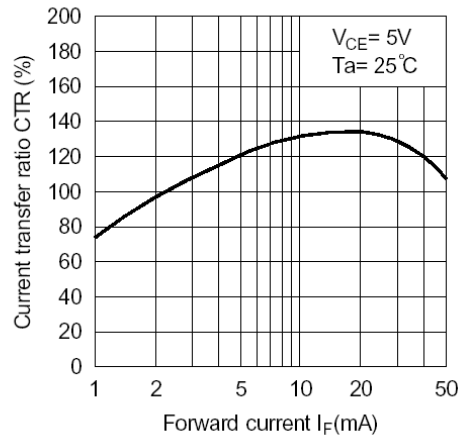


Fig.6 C

Collector current I_c (mA)

Fig.7 Relative Current Transfer Ratio vs. Ambient Temperature

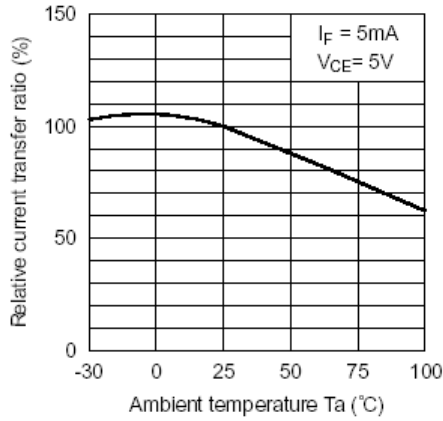


Fig.8 Collector-emitter Saturation Voltage vs. Ambient Temperature

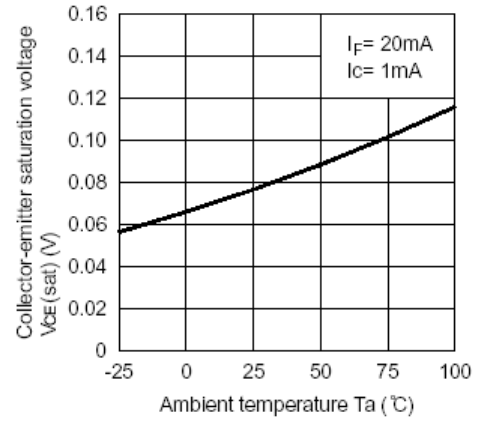


Fig.9 Collector Dark Current vs. Ambient Temperature

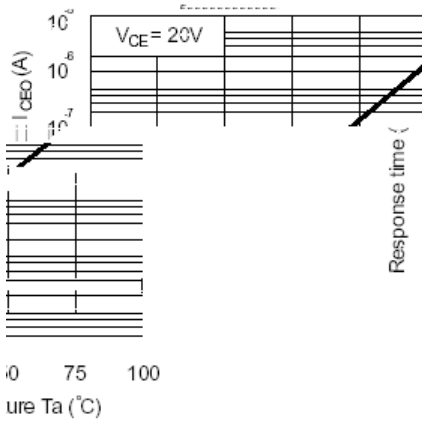
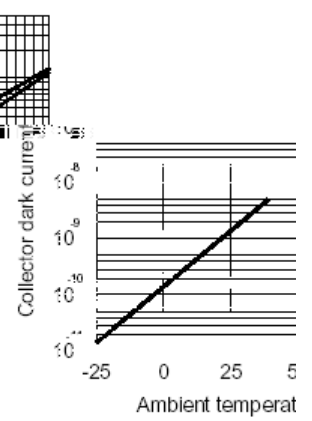
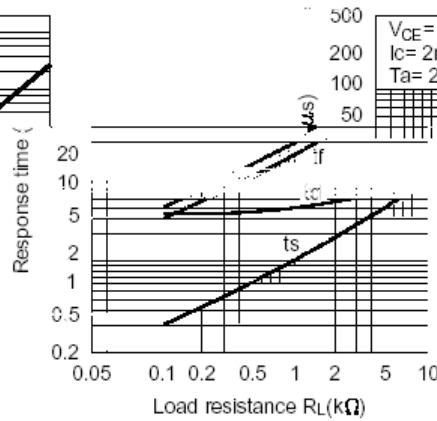
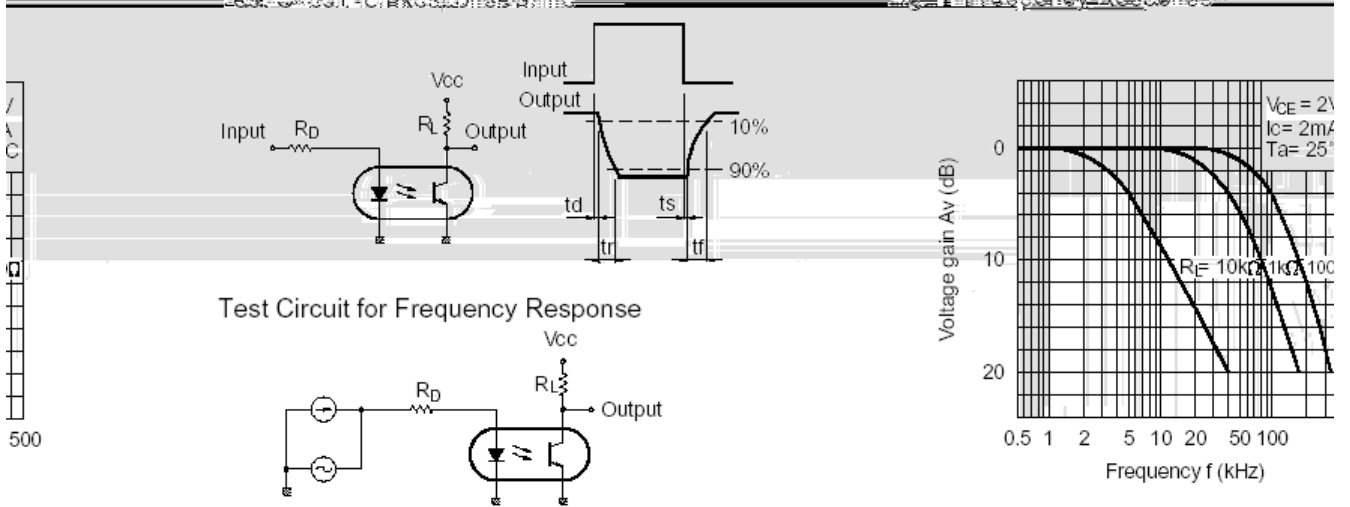


Fig.10 Response Time vs. Load Resistance



Test Circuit for Dynamic Time

Fig.11 Frequency Response



		MIL-STD-750: 1026 MIL-STD-883: 1005 JIS C 7021 : B-1	$I_f=50mA$ 1000	0/20
		JIS C 7021 : B-11	$T_a=+85 \pm 5$, RH=85% PTR= V_{CE} *80% =1000hrs	0/20
		JIS C 7021 : B-8	$T_a=+105 \pm 5$ PTR= V_{CE} =1000hrs	0/20
		MIL-STD-883: 1008 JIS C 7021 : B-10	=+125 ± 5 =1,000hrs	0/20
		JIS-C-7021 : B-12	=-55 ± 5 =1,000hrs	0/20
		JESD 22-A102-B	P=15PSI G, $T_a=121$. =100%RH, 48hrs	0/20
		MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1010 JIS C 7021 : A-4	125 ~ 25 ~ -55 ~ 25 30min 5min 30min 5min =20cycle	0/20
		MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1011	125 ~ -55 20min 20min =20cycle	0/20
		MIL-STD-202: 201A MIL-STD-750: 2031 JIS C 7021 : A-1	260 , 10 \pm 1 .	0/20
		MIL-S-883: 2003 JIS C 7021 : A-2	235 , 5 \pm 1 .	0/20

V_F (V)	$I_f=20mA$	Over Ux1.0
I_r (μA)	$V_r=4V$	Over Ux1.0
CTR(%)	$I_f=5mA$, $V_{CE}=5V$	Shift>1.2
$V_{CE(sat)}$	$I_F=20mA$, $I_C=1mA$	Over Ux1.0
BV_{CEO}	$I_C=0.1mA$, $I_F=0$	Over Lx1.0
BV_{ECO}	$I_E=10\mu A$, $I_F=0$	Over Lx1.0