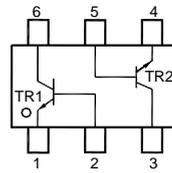
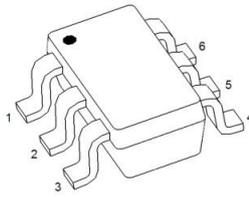


DUAL TRANSISTOR (NPN+NPN)



SOT-363

MARKING: K4N
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	180	V
Collector Emitter Voltage	V_{CEO}	160	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_{C}	600	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 1\text{ mA}$	h_{FE}	80	-	-
at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 10\text{ mA}$	h_{FE}	80	250	-
at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 50\text{ mA}$	h_{FE}	30	-	-
Collector Base Cutoff Current at $V_{\text{CB}} = 120\text{ V}$	I_{CBO}	-	50	nA
Emitter Base Cutoff Current at $V_{\text{EB}} = 4\text{ V}$	I_{EBO}	-	50	nA
Collector Base Breakdown Voltage at $I_{\text{C}} = 100\text{ }\mu\text{A}$	$V_{(\text{BR})\text{CBO}}$	180	-	V
Collector Emitter Breakdown Voltage at $I_{\text{C}} = 1\text{ mA}$	$V_{(\text{BR})\text{CEO}}$	160	-	V
Emitter Base Breakdown Voltage at $I_{\text{E}} = 10\text{ }\mu\text{A}$	$V_{(\text{BR})\text{EBO}}$	6	-	V
Collector Emitter Saturation Voltage at $I_{\text{C}} = 10\text{ mA}$, $I_{\text{B}} = 1\text{ mA}$ at $I_{\text{C}} = 50\text{ mA}$, $I_{\text{B}} = 5\text{ mA}$	$V_{\text{CE}(\text{sat})}$	- -	0.15 0.2	V
Base Emitter Saturation Voltage at $I_{\text{C}} = 10\text{ mA}$, $I_{\text{B}} = 1\text{ mA}$ at $I_{\text{C}} = 50\text{ mA}$, $I_{\text{B}} = 5\text{ mA}$	$V_{\text{BE}(\text{sat})}$	- -	1 1	V
Gain Bandwidth Product at $V_{\text{CE}} = 10\text{ V}$, $I_{\text{C}} = 10\text{ mA}$, $f = 100\text{ MHz}$	f_{T}	100	300	MHz
Collector Base Capacitance at $V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{cbo}	-	6	pF

Typical Characteristics

Fig. 1 $h_{FE} - I_C$

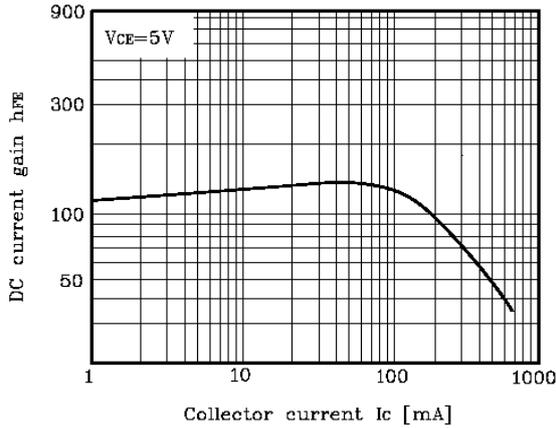


Fig. 2 $I_C - V_{BE}$

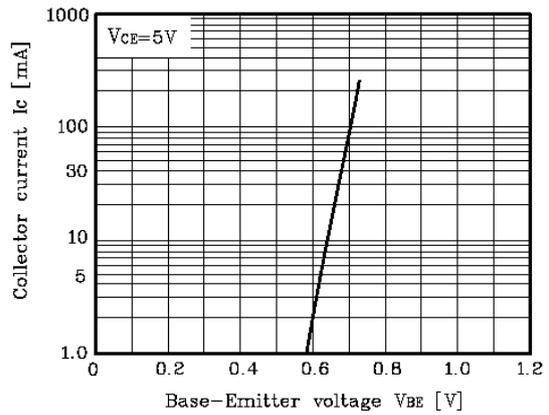


Fig. 3 $f_T - I_C$

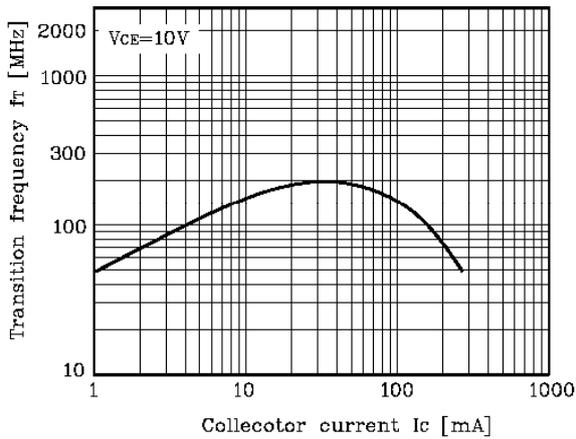


Fig. 4 $V_{CE(sat)}, V_{BE(sat)} - I_C$

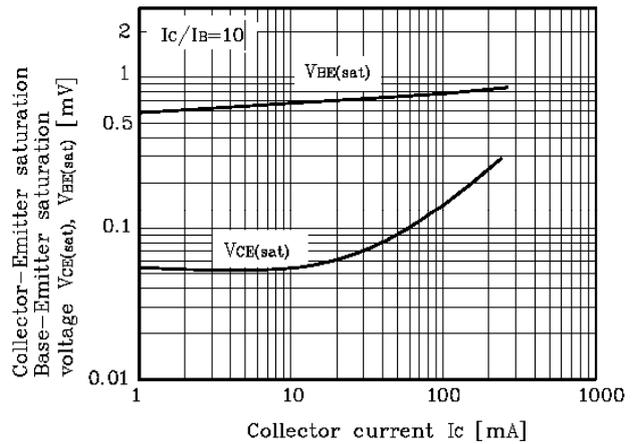


Fig. 5 $C_{ob} - V_{CB}$

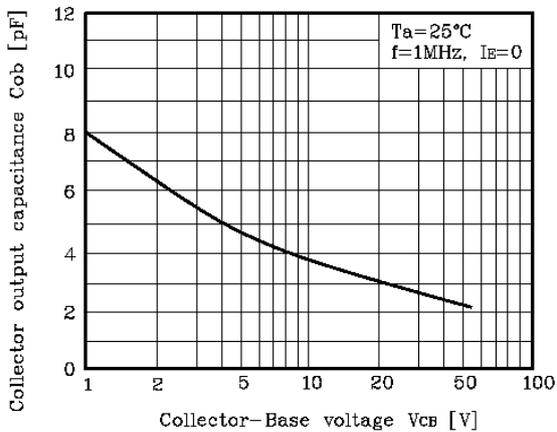
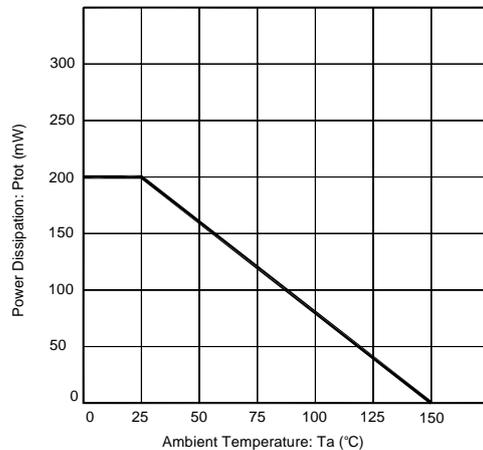
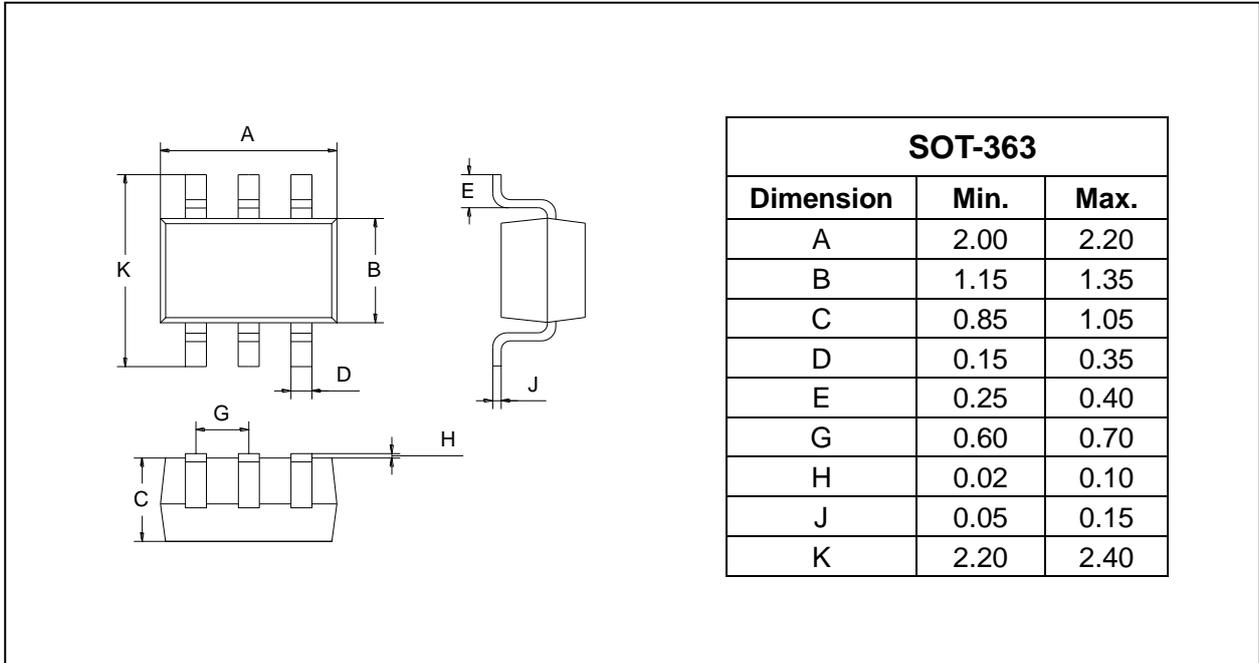


Fig.6 $P_{tot} - T_a$



Plastic surface mounted package

SOT-363



SOLDERING FOOTPRINT

