SPTECH NPN Power Transistors

DESCRIPTION

·With TO-3PL(264), package
·Complement to type MJL21193
·Excellent gain linearity

APPLICATIONS

·Designed for high power audio output,disk head positioners and linear applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

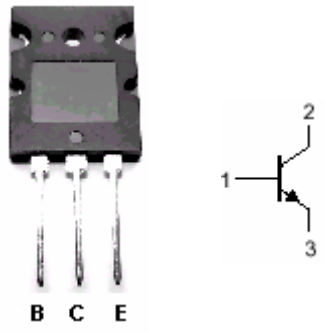


Fig.1 simplified outline (TO-3PL)(264) and symbol

ABSOLUTE MAXIMUM RATINGS(Tc=25□)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	400	V
V_{CEO}	Collector-emitter voltage	Open base	250	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		16	A
I_{CM}	Collector current-peak		30	A
I_B	Base current		5	A
P_D	Total power dissipation	T_C=25□	200	W
T_j	Junction temperature		-65~150	□
T_{stg}	Storage temperature		-65~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance from junction to case	0.7	□/W

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=100mA ;I_B=0	250			V
$V_{CE(sat)-1}$	Collector-emitter saturation voltage	I_C=8A ;I_B=0.8A			1.4	V
$V_{CE(sat)-2}$	Collector-emitter saturation voltage	I_C=16A ;I_B=3.2A			4.0	V
$V_{BE(ON)}$	Base-emitter on voltage	I_C=8A ; V_{CE}=5V			2.2	V
I_{CEX}	Collector cut-off current	V_{CE}=250V; $V_{BE(off)}$=1.5V			100	μA
I_{CEO}	Collector cut-off current	V_{CE}=200V; I_B=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			100	μA
h_{FE-1}	DC current gain	I_C=8A ; V_{CE}=5V	25		75	
h_{FE-2}	DC current gain	I_C=16A ; V_{CE}=5V	8			
f_T	Transition frequency	I_C=1A ; V_{CE}=10V,f=1MHz	4			MHz
C_{OB}	Collector output capacitance	f=1MHz;V_{CB}=10V,I_E=0			500	pF