2SD1730

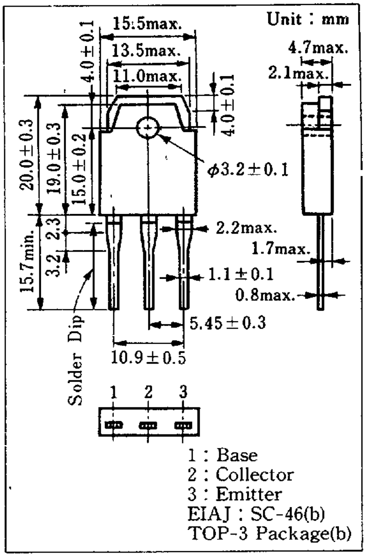
Silicon PNP Triple-Diffused Planar Type

Horizontal Deflection Output

■ Features

- Damper diode built-in
- Minimizes external component counts and simplifies circuitry
- High breakdown voltage, high reliability
- High speed switching
- Wide area of safety operation (ASO)

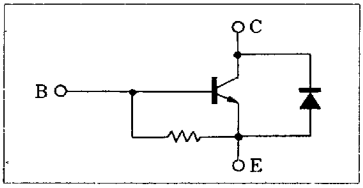
■ Package Dimensions



■ Absolute Maximum Ratings (Tc=25°C)

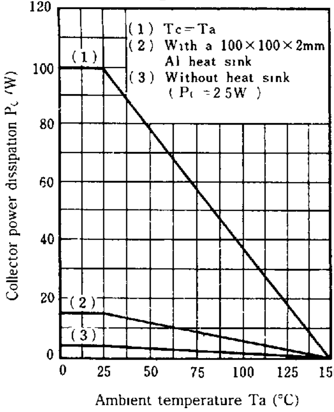
Item		Symbol	Value	Unit
Collector-base voltage		V_{CBO}	1500	V
Collector-emitter voltage		V_{CES}	1500	V
		V_{CEO}	700	V
Emitter-base voltage		V_{EBO}	7	V
Peak collector current		I_{CP}	15	A
Collector current		I_C	5	A
Base current		I_B	2	A
Collector power dissipation	Tc=25℃	P_C	100	W
	Ta=25℃		2.5	
Junction temperature		T_j	150	℃
Storage temperature		T_{stg}	−55～+150	℃

■ Inner Circuit

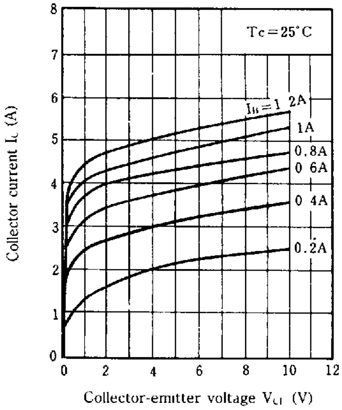


■ Electrical Characteristics (Tc=25°C)

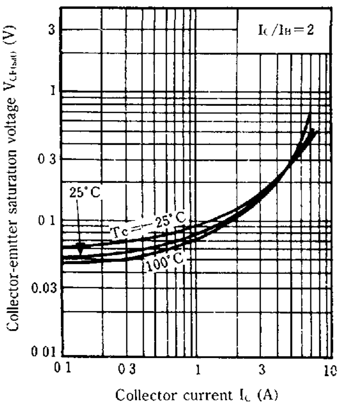
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	V_{CB}=750 V, I_E=0			10	μA
		V_{CB}=1500 V, I_E=0			1	mA
Emitter-base voltage	V_{EBO}	I_E=500 mA, I_C=0	7			V
DC current gain	h_{FE}	V_{CE}=5 V, I_C=1 A	5		25	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=4 A, I_B=1 A			8	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=4 A, I_B=1 A			1.5	V
Transition frequency	f_T	V_{CE}=10V, I_C=1A, f=0.5MHz		2		MHz
Storage time (L load)	t_{stg}	I_C=4A, I_{B1}=1A			9	μs
Fall time (L load)	t_f	I_{B2}=−1A, L_{leak}=5μA			0.8	μs
Storage time (R load)	t_{stg}	I_C=4 A, I_{B1}=0.8 A		1.5		μs
Fall time (R load)	t_f	I_{B2}=−1.6 A, V_{CC}=200 V		0.2		μs
Diode forward voltage	V_F	I_C=−5 A, I_B=0			−2.3	V



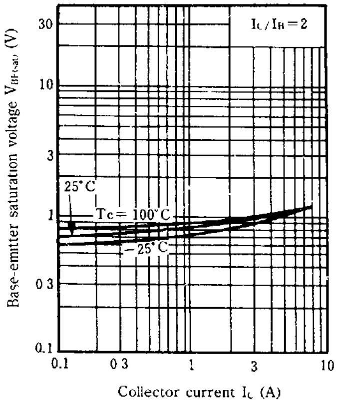
P_C — Ta



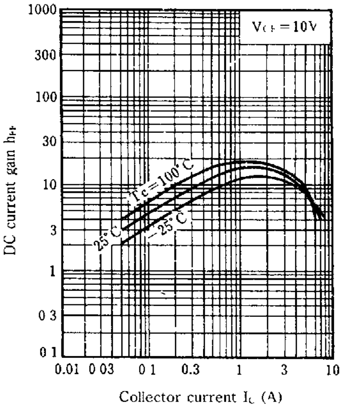
I_C — V_{CE}



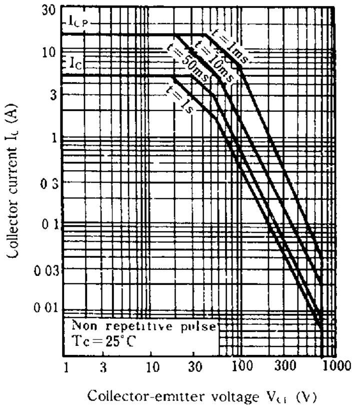
$V_{CE(sat)}$ — I_C



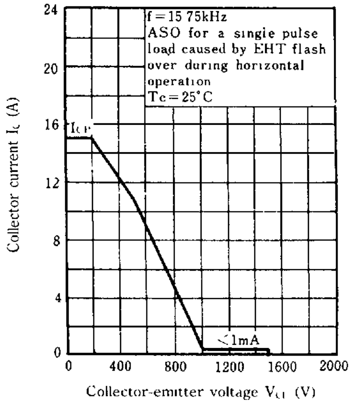
$V_{BE(sat)}$ — I_C



h_{FE} — I_C



Area of safe operation (ASO)



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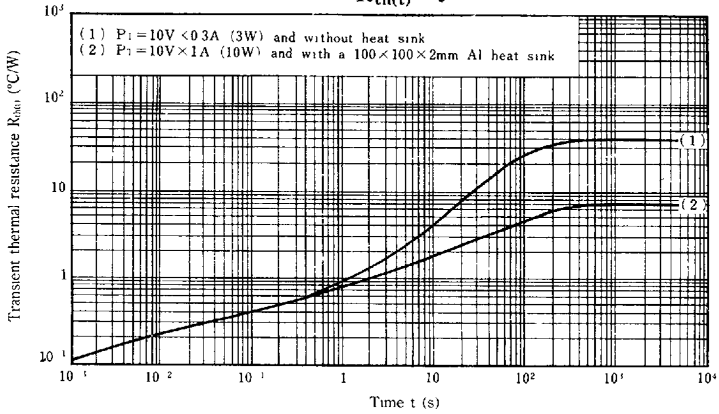

$R_{th(t)}$ — t