

2SD1729

Silicon PNP Triple-Diffused Planar Type

Horizontal Deflection Output

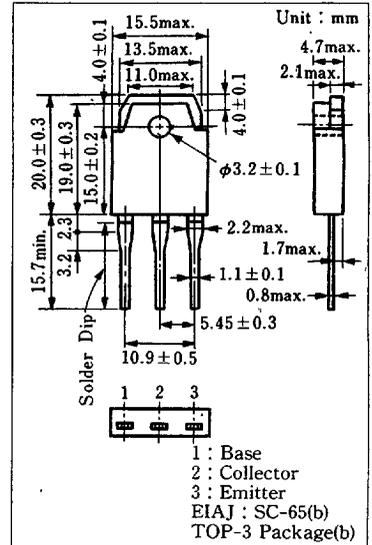
■ Features

- 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)

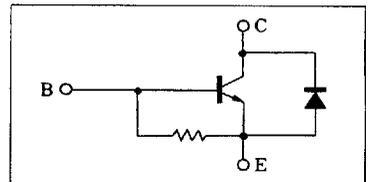
■ Absolute Maximum Ratings (Tc=25°C)

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}	10	A
Collector current	I_C	3.5	A
Base current	I_B	1.5	A
Collector power dissipation (Tc=25°C)	P_C	60	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

■ Package Dimensions

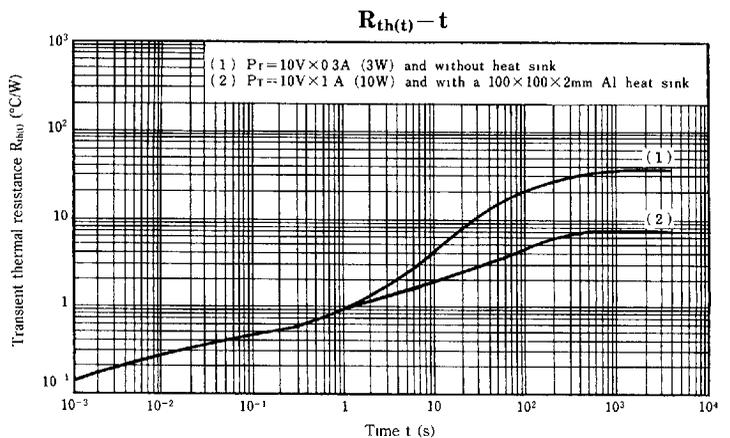
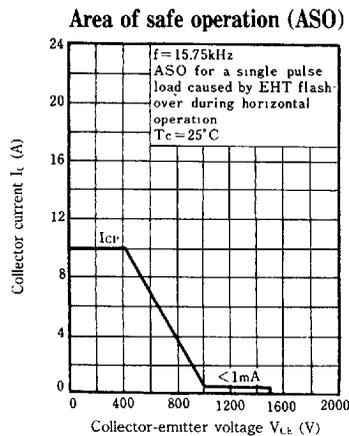
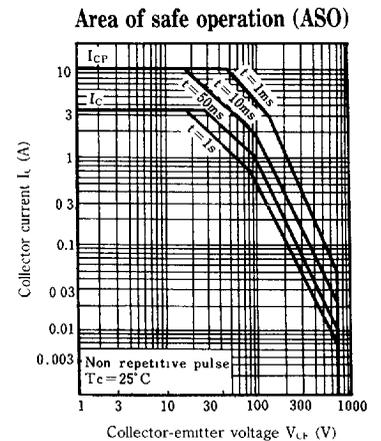
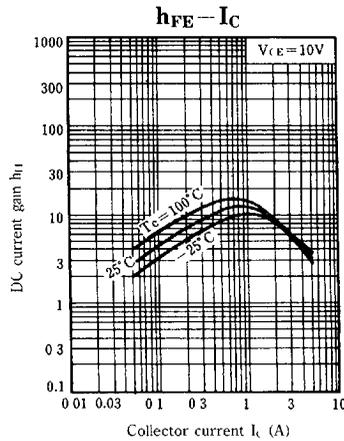
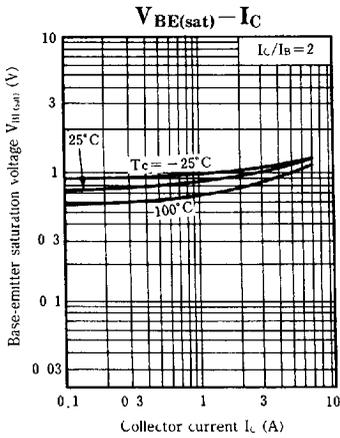
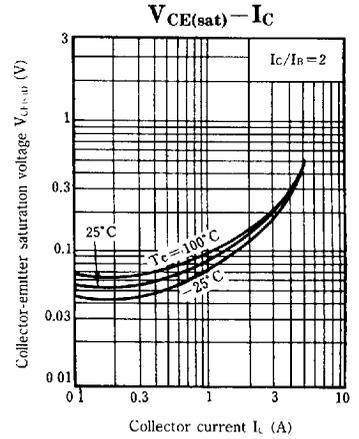
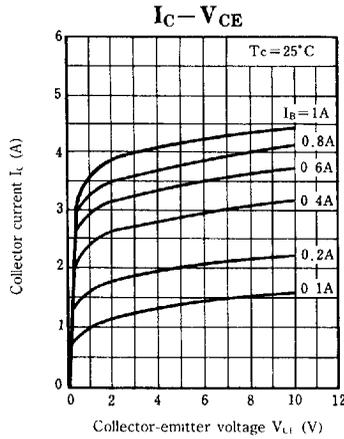
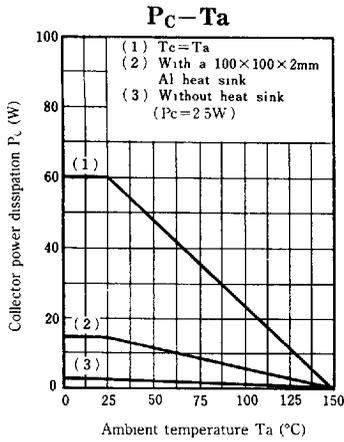


■ Inner Circuit



■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 750 \text{ V}, I_E = 0$			10	μA
		$V_{CB} = 1500 \text{ V}, I_E = 0$			1	mA
Emitter-base voltage	V_{EBO}	$I_E = 500 \text{ mA}, I_C = 0$	7			V
DC current gain	h_{FE}	$V_{CE} = 5 \text{ V}, I_C = 0.5 \text{ A}$	5		25	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3 \text{ A}, I_B = 0.8 \text{ A}$			8	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 3 \text{ A}, I_B = 0.8 \text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE} = 10 \text{ V}, I_C = 0.5 \text{ A}, f = 0.5 \text{ MHz}$		2		MHz
Storage time (L load)	t_{stg}	$I_C = 3 \text{ A}, I_{B1} = 0.8 \text{ A}$			8	μs
Fall time (L load)	t_f	$I_{B2} = -0.8 \text{ A}, L_{leak} = 5 \mu\text{H}$			0.8	μs
Storage time (R load)	t_{stg}	$I_C = 3 \text{ A}, I_{B1} = 0.8 \text{ A}$		1.5		μs
Fall time (R load)	t_f	$I_{B2} = -1.6 \text{ A}, V_{CC} = 200 \text{ V}$		0.2		μs
Diode forward voltage	V_F	$I_C = -3.5 \text{ A}, I_B = 0$			-2	V



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