

# 2SD1729

## Silicon PNP Triple-Diffused Planar Type

### Horizontal Deflection Output

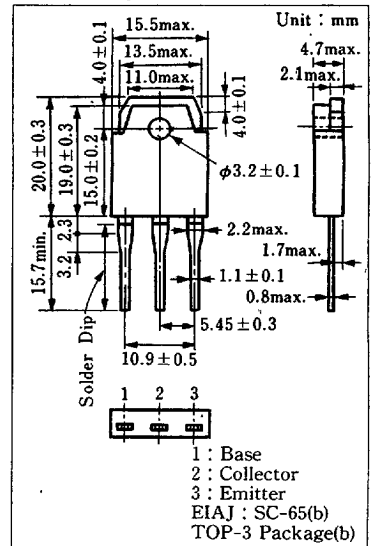
#### ■ Features

- 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)

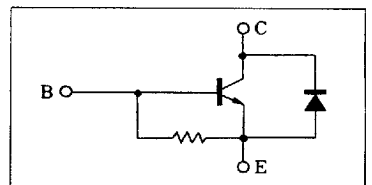
#### ■ Absolute Maximum Ratings (Tc=25°C)

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

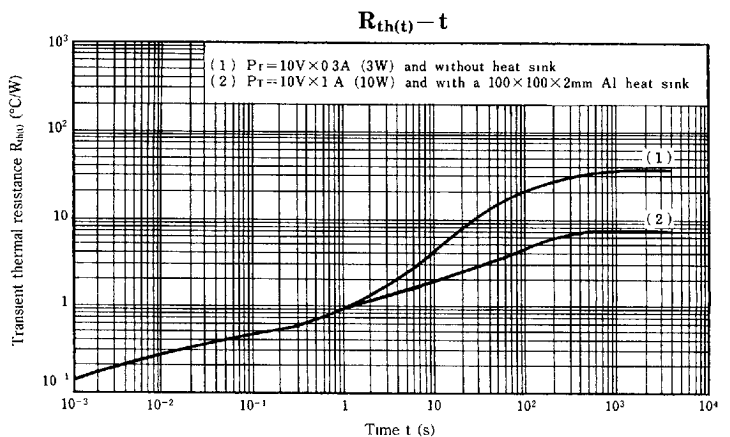
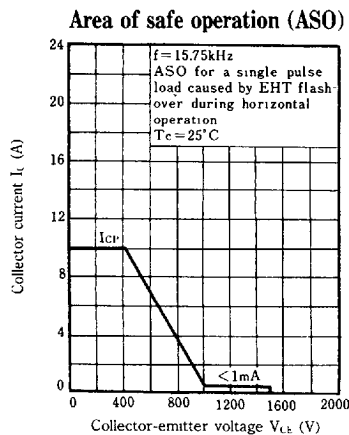
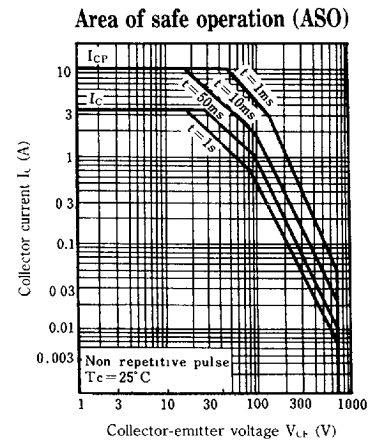
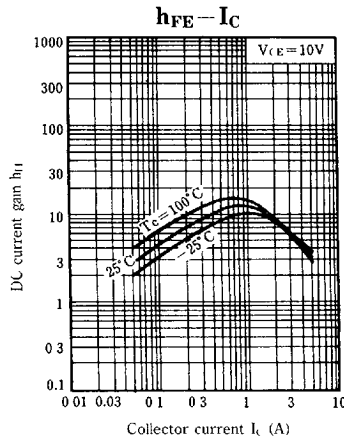
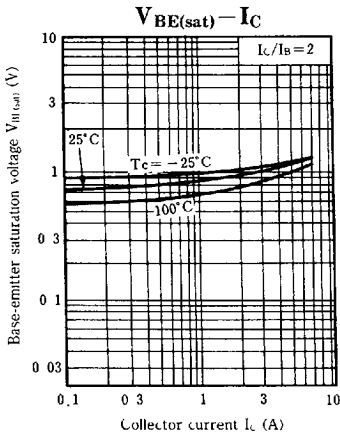
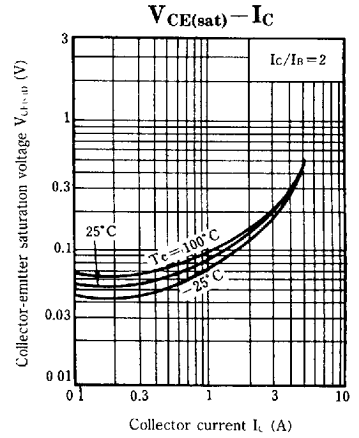
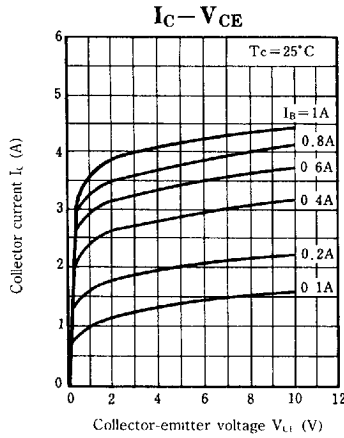
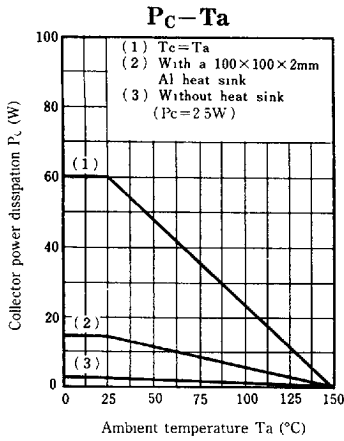


#### ■ Inner Circuit



#### ■ 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	$\mu\text{A}$
		$V_{CB} = 1500 \text{ V}, I_E = 0$			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	$\mu\text{s}$
Fall time (L load)	$t_f$	$I_{B2} = -0.8 \text{ A}, L_{leak} = 5 \mu\text{H}$			0.8	$\mu\text{s}$
Storage time (R load)	$t_{stg}$	$I_C = 3 \text{ A}, I_{B1} = 0.8 \text{ A}$		1.5		$\mu\text{s}$
Fall time (R load)	$t_f$	$I_{B2} = -1.6 \text{ A}, V_{CC} = 200 \text{ V}$		0.2		$\mu\text{s}$
Diode forward voltage	$V_F$	$I_C = -3.5 \text{ A}, I_B = 0$			-2	V



6932852 0016810 474