2SC3527

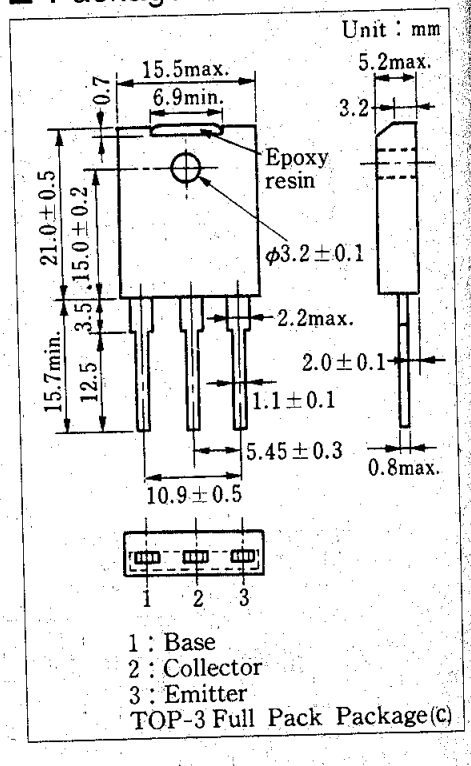
Silicon PNP Triple-Diffused Planar Type

High Breakdown Voltage, High Speed Switching

■ Features

- High speed switching
- High collector-base voltage (V_{CBO})
- Good linearity of DC current gain (h_{FE})
- "Full Pack" package for simplified mounting on a heat sink with one screw

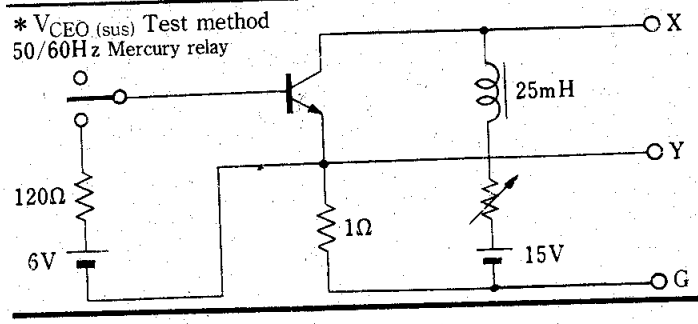
■ Package Dimensions



■ Absolute Maximum Ratings (Tc=25°C)

Item		Symbol	Value	Unit
Collector-base voltage		V_{CBO}	500	V
Collector-emitter voltage		V_{CES}	500	V
		V_{CEO}	400	V
Emitter-base voltage		V_{EBO}	7	V
Peak collector current		I_{CP}	25	A
Collector current		I_C	15	A
Base current		I_B	6	A
Collector power dissipation	Tc=25 ℃	P_C	100	W
	Ta=25 ℃		3	
Junction temperature		T_j	150	℃
Storage temperature		T_{stg}	−55～+150	℃

■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	V_{CB}=500 V, I_E=0			100	μA
Emitter cutoff current	I_{EBO}	V_{EB}=7 V, I_C=0			100	μA
Collector-base voltage	$V_{CEO(sus)}$*	I_C=0.5 A, L=25 mH	400			V
DC current gain	h_{FE1}	V_{CE}=5 V, I_C=2 A	15			
	h_{FE2}	V_{CE}=5 V, I_C=7 A	10			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=7 A, I_B=1.4 A			1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=7 A, I_B=1.4 A			1.5	V
Transition frequency	f_T	V_{CE}=10V, I_C=1A, f=1MHz		15		MHz
Turn-on time	t_{on}	I_C=7 A			1	μs
Storage time	t_{stg}	I_{B1}=1.4 A, I_{B2}=−1.4 A			2.5	μs
Collector current fall time	t_f	V_{CC}=125 V			1	μs

* $V_{CEO(sus)}$ Test method
50/60Hz Mercury relay