## 2SC5462

Silicon NPN Triple Diffused Character Display Horizntal Deflection Output

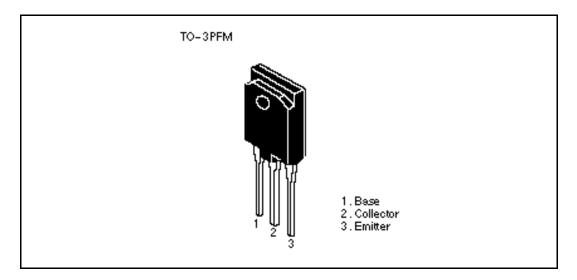
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3rd. Edition December 1997 Target Specification

#### Features

- High breakdown voltage  $V_{CBO} = 1500 \text{ V}$
- High speed switching  $t_{f} = 0.15 \; \mu \text{sec (typ.) at } f_{H} = 64 \text{kHz}$
- Isolated package TO-3PFM

#### Outline





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#### **Absolute Maximum Ratings** (Ta = 25°C)

Item	Symbol	Ratings	Unit	
Collector to base voltage	V <sub>CBO</sub>	1500	V	
Collector to emitter voltage	V <sub>CEO</sub>	700	V	
Emitter to base voltage	V <sub>EBO</sub>	6	V	
Collector current	Ι <sub>c</sub>	20	А	
Collector peak current	i <sub>c(peak)</sub>	40	А	
Collector power dissipation	P <sub>C</sub> <sup>Note1</sup>	50	W	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

Note: 1. Value at  $Tc = 25^{\circ}C$ 

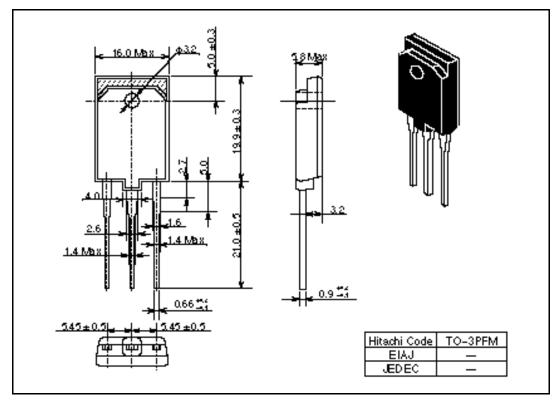
### **Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Тур	Мах	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	700	—	—	V	$I_{\rm c}$ = 10mA, $R_{\rm BE}$ =
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	6	—	—	V	$I_{\rm E} = 10$ mA, $I_{\rm C} = 0$
Collector cutoff current	I <sub>CES</sub>	—	—	500	μA	$V_{ce} = 1500V, R_{be} = 0$
DC current transfer ratio	$h_{\text{FE1}}$	10	_	40		$V_{ce} = 5 \text{ V}, \text{ I}_{c} = 1 \text{ A}$
DC current transfer ratio	$h_{\text{FE2}}$	3.5	_	6.5		$V_{ce} = 5 \text{ V}, I_{c} = 10 \text{A}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	—	5	V	$I_{\rm C} = 12$ A, $I_{\rm B} = 4$ A
Base to emitter saturation voltage	$V_{\text{BE(sat)}}$	_	—	1.5	V	$I_{\rm C} = 12$ A, $I_{\rm B} = 4$ A
Fall time	t <sub>f</sub>	_	0.2	0.4	μs	I <sub>CP</sub> = 8A, I <sub>B1</sub> = 3A f <sub>H</sub> = 31.5kHz
Fall time	t <sub>f</sub>	_	0.15	_	μs	$I_{CP} = 8A, I_{B1} = 2A$ $f_{H} = 64$ kHz

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### **Package Dimensions**





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