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Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore





## General Description

Using advanced field stop trench and shorted-anode technology, Fairchild's shorted-anode trench IGBTs offer superior conduction and switching performances for switching applications. The device can operate in parallel.

## Applications

- Induction Heating, Microwave Oven

## Absolute Maximum Ratings

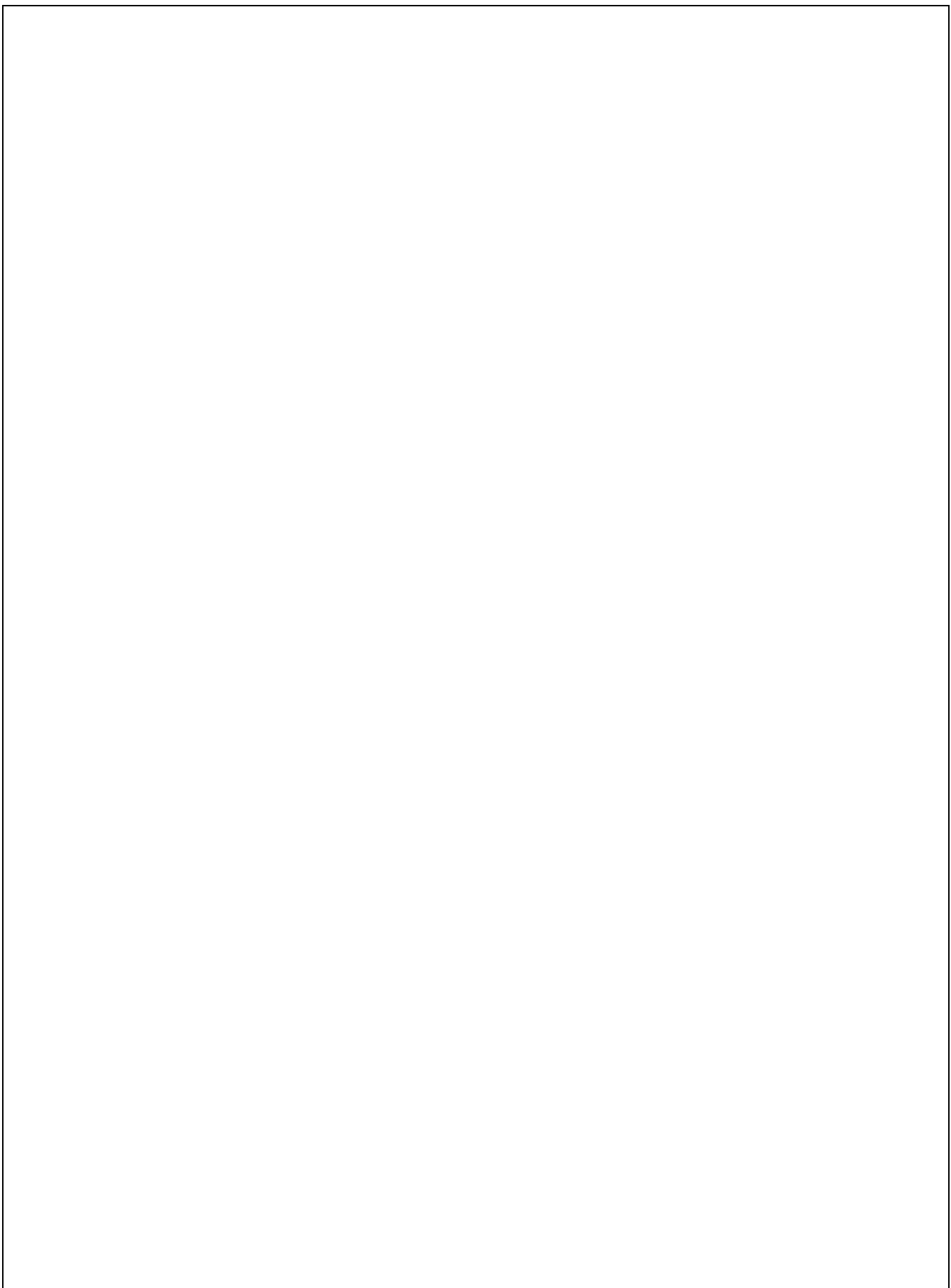
Symbol	Description	Ratings	Unit
$V_{CES}$	Collector to Emitter Voltage	1250	V
$V_{GES}$	Gate to Emitter Voltage	$\pm 25$	V
$I_C$	Collector Current	30	A
	Collector Current	@ $T_C = 25^\circ\text{C}$ @ T	

## Thermal Characteristics

**Notes:**

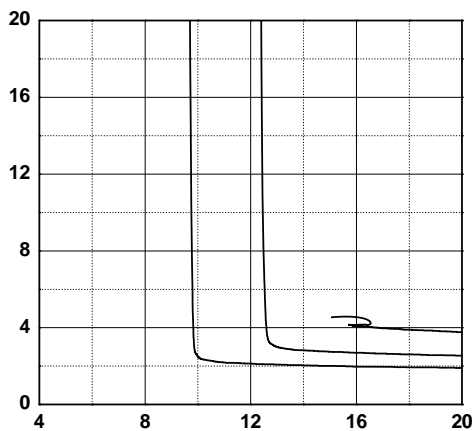
1: Limited by  $T_{jmax}$





**Typical Performance Characteristics**

**Figure 7. Saturation Voltage vs.  $V_{GE}$**



**Figure 8. Capacitance Characteristics**

**Figure 9. Gate charge Characteristics**

**Figure 10. SOA Characteristics**

**Figure 11. Turn-on Characteristics vs. Gate Resistance**

**Figure 12. Turn-off Characteristics vs. Gate Resistance**

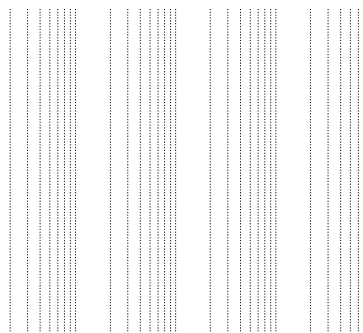
## Typical Performance Characteristics

Figure 13. Turn-on Characteristics vs.

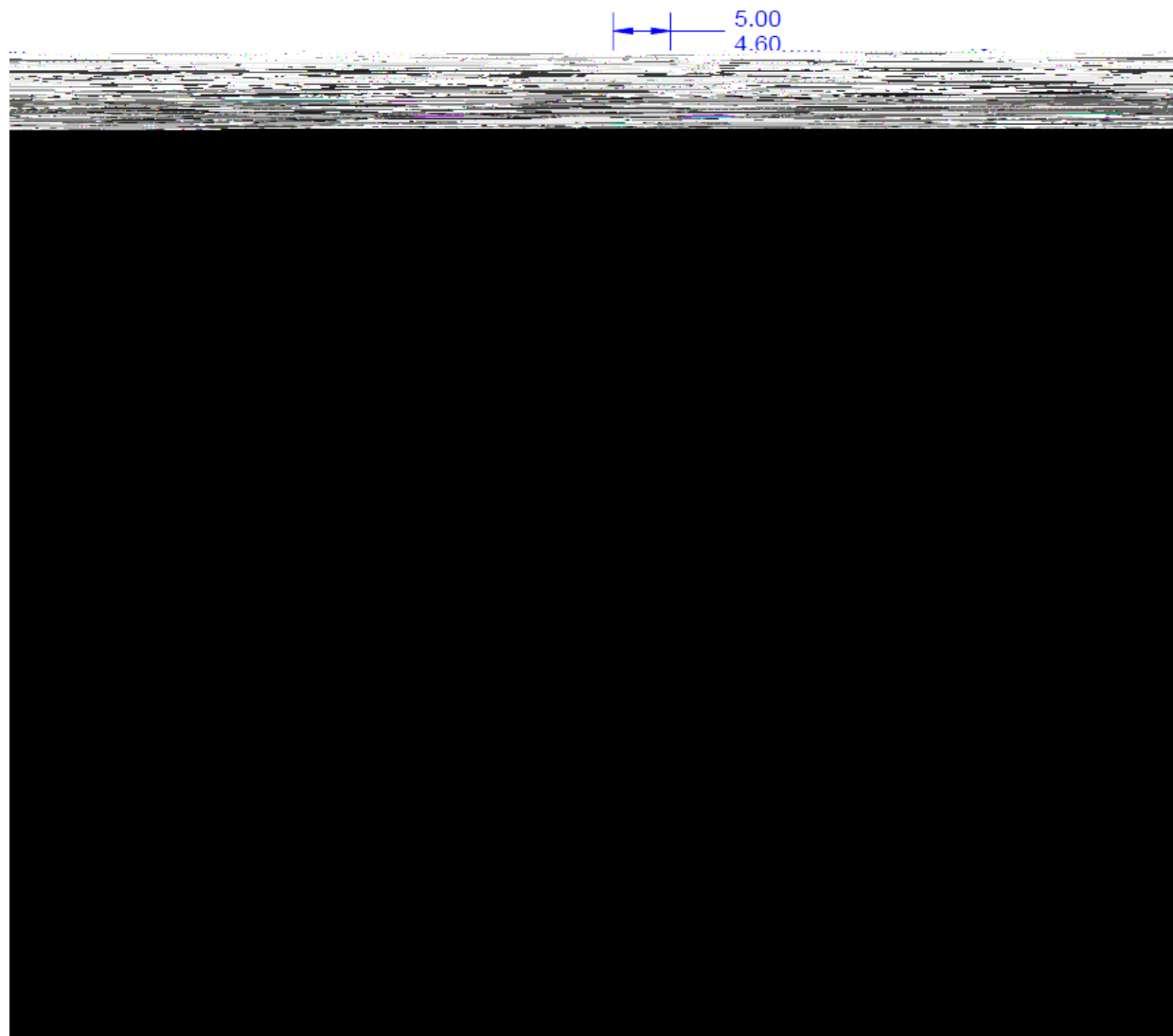
Figure 14. Turn-off Characteristics vs.

## Typical Performance Characteristics

Figure 19. Transient Thermal Impedance of IGBT



## Mechanical Dimensions



**Figure 20. TO-3P 3L - 3LD, T03, PLASTIC, EIAJ SC-65**

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Dimensions in Millimeters



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