

Product	Transistor	Type	QST3
Package	TSMT6	JEDEC Code	SOT-457T

## 1. Thermal Resistance / 熱抵抗データ



測定項目 ITEM	記号 SYMBOL	測定値 VALUE	単位 UNIT
ジャンクション - 雰囲気間熱抵抗 Thermal resistance between junction and ambient temperature	$R_{th(j-a)}$	250.0	°C/W
ジャンクション - ケース間熱抵抗 Thermal resistance between junction and case	$R_{th(j-c)}$	77.6	°C/W

$R_{th(j-c)}$ は、周囲温度25°Cにおいて、ケース標印面の最高温度を放射温度計にて測定しました。

この時のケース温度を $T_{case}$ とし、また、ジャンクション温度を $T_j$ として、以下の式より算出しました。

We calculated  $R_{th(j-c)}$  using the below formula.

Case temperature( $T_{case}$ ) was measured at the point of maximum temperature of the top side of the case(the marking side)under the condition of

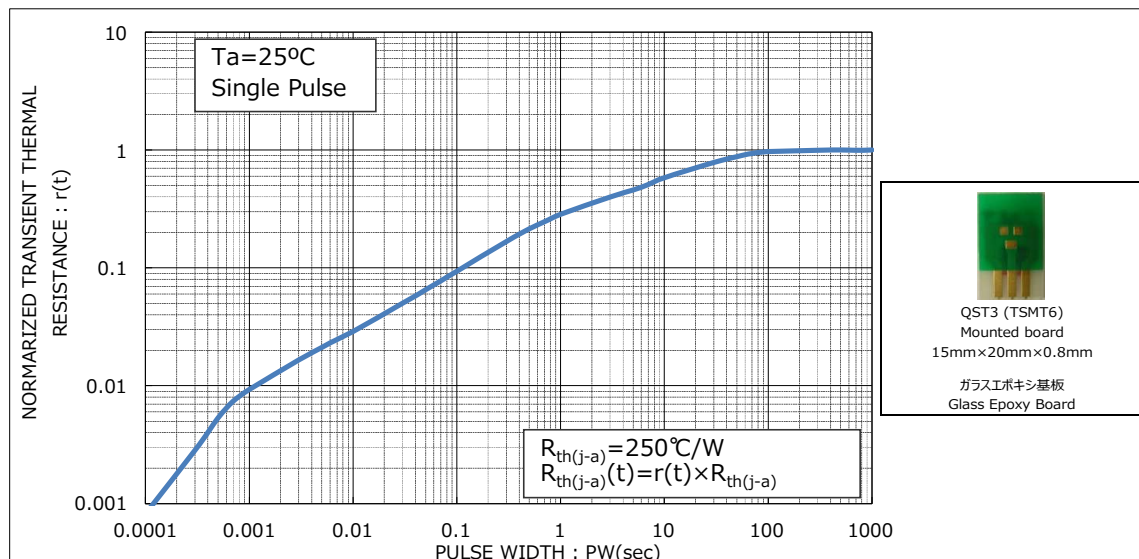
$T_a=25^\circ\text{C}$  by radiation thermometer.

$$R_{th(j-c)} = \frac{T_j - T_{case}}{P_c}$$

$P_c$ :印加電力  
Applied Power

$R_{th(j-a)}$ ,  $R_{th(j-c)}$ は、実装基板や半田付けによる放熱条件やケース温度測定方法によって大きく（～数倍程度）変化しますので、あくまでも参考データとしてご活用ください。  
Generally speaking, the values of  $R_{th(j-a)}$  and  $R_{th(j-c)}$  may vary depending on the thermal radiation ability of the board on which the device is mounted, as well as the device itself.  
Therefore, the value of  $R_{th(j-a)}$  and  $R_{th(j-c)}$  measured under our board condition can be very different from the one measured under customer's board condition.  
In other words, the value of  $R_{th(j-a)}$  and  $R_{th(j-c)}$  measured under our condition cannot always be applied to customer's condition.

## 2. Transient Thermal Resistance / 過渡熱抵抗



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