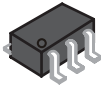
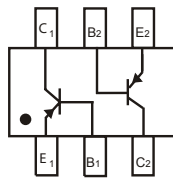
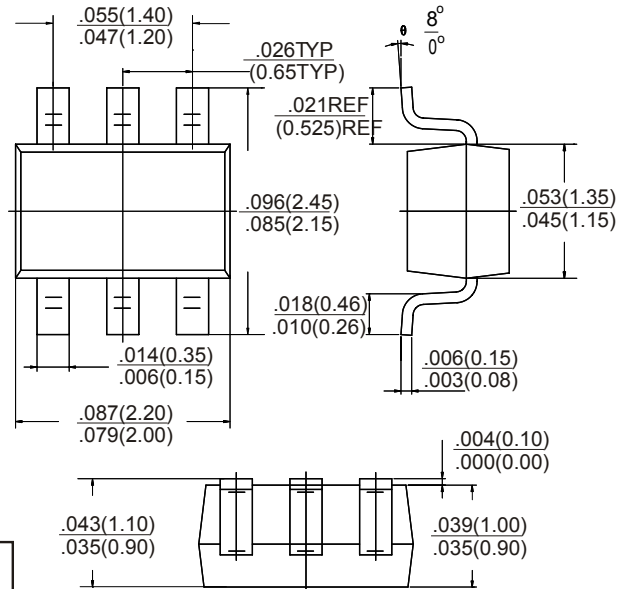


RoHS Compliant Product



SOT-363



Dimensions in inches and (millimeters)

*** Features**

Power dissipation

$$P_{CM} : 0.3 \text{ W (Tamp.= 25}^\circ\text{C)}$$

Collector current

$$I_{CM} : -0.2 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -50 \text{ V}$$

Operating & Storage junction Temperature

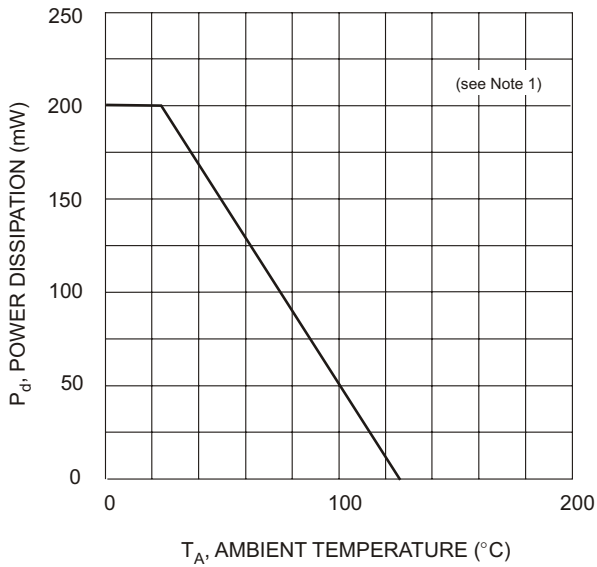
$$T_j, T_{stg} : -55^\circ\text{C} \sim +150^\circ\text{C}$$

Marking : 3C

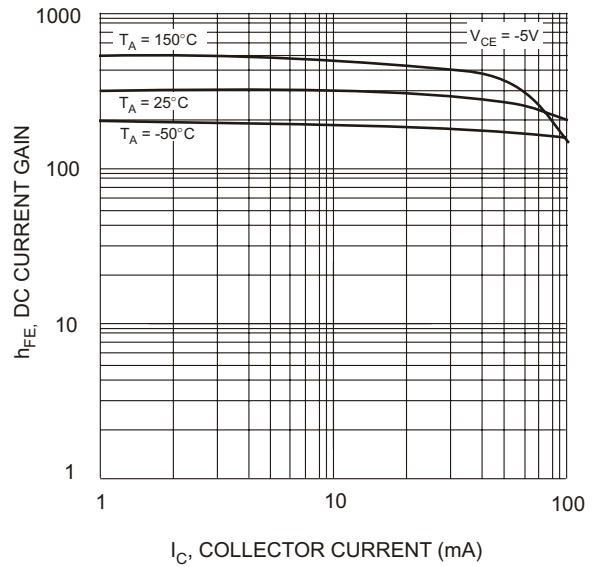
Electrical Characteristics(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$			-15	nA
DC current gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	125		630	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -0.5\text{mA}$			-0.3	V
	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$			-0.65	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	-0.6		-0.75	V
	$V_{BE(1)}$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$			-0.82	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		3.5		pF
Noise figure	NF	$V_{CE} = -5\text{V}, I_C = -0.2\text{mA}$ $F = 1\text{kHz}, R_S = 2\text{k}\Omega, BW = 200\text{Hz}$		2.5		dB

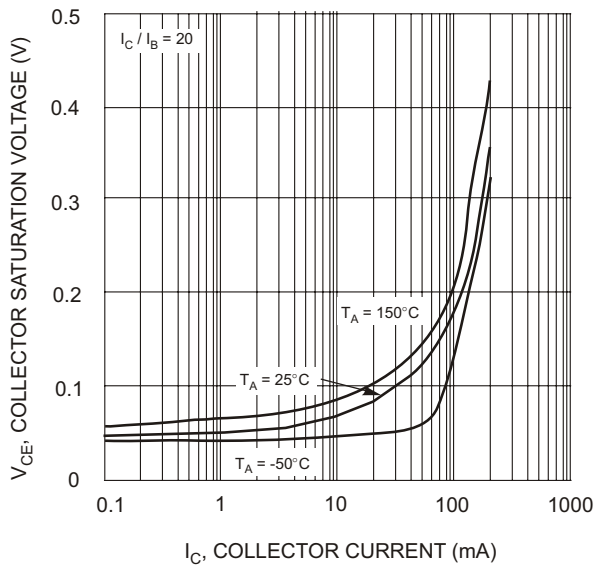
Note: 1 Short duration test pulse used to minimize self-heating effect.



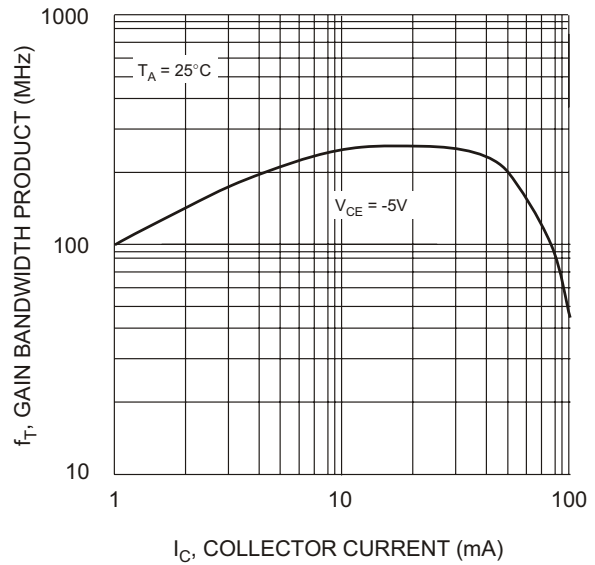
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1, Power Derating Curve



I_C , COLLECTOR CURRENT (mA)
Fig. 2, DC Current Gain vs. Collector Current



I_C , COLLECTOR CURRENT (mA)
Fig. 3, Collector Saturation Voltage vs. Collector Current



I_C , COLLECTOR CURRENT (mA)
Fig. 4, Gain Bandwidth Product vs. Collector Current