

electrical characteristics at 25°C case temperature (unless otherwise noted)

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$ Collector-emitter breakdown voltage	$I_C = -30 \text{ mA}$ $I_B = 0$ (see Note 4)	BDV64 BDV64A BDV64B BDV64C	-60 -80 -100 -120		V
I_{CEO} Collector-emitter cut-off current	$V_{CB} = -30 \text{ V}$ $I_B = 0$ $V_{CB} = -40 \text{ V}$ $I_B = 0$ $V_{CB} = -50 \text{ V}$ $I_B = 0$ $V_{CB} = -60 \text{ V}$ $I_B = 0$	BDV64 BDV64A BDV64B BDV64C		-2 -2 -2 -2	mA
I_{CBO} Collector cut-off current	$V_{CB} = -60 \text{ V}$ $I_E = 0$ $V_{CB} = -80 \text{ V}$ $I_E = 0$ $V_{CB} = -100 \text{ V}$ $I_E = 0$ $V_{CB} = -120 \text{ V}$ $I_E = 0$ $V_{CB} = -30 \text{ V}$ $I_E = 0$ $T_C = 150^\circ\text{C}$ $V_{CB} = -40 \text{ V}$ $I_E = 0$ $T_C = 150^\circ\text{C}$ $V_{CB} = -50 \text{ V}$ $I_E = 0$ $T_C = 150^\circ\text{C}$ $V_{CB} = -60 \text{ V}$ $I_E = 0$ $T_C = 150^\circ\text{C}$	BDV64 BDV64A BDV64B BDV64C BDV64 BDV64A BDV64B BDV64C		-0.4 -0.4 -0.4 -0.4 -2 -2 -2 -2	mA
I_{EBO} Emitter cut-off current	$V_{EB} = -5 \text{ V}$ $I_C = 0$			-5	mA
h_{FE} Forward current transfer ratio	$V_{CE} = -4 \text{ V}$ $I_C = -5 \text{ A}$ (see Notes 4 and 5)		1000		
$V_{CE(sat)}$ Collector-emitter saturation voltage	$I_B = -20 \text{ mA}$ $I_C = -5 \text{ A}$ (see Notes 4 and 5)			-2	V
V_{BE} Base-emitter voltage	$V_{CE} = -4 \text{ V}$ $I_C = -5 \text{ A}$ (see Notes 4 and 5)			-2.5	V
V_{EC} Parallel diode forward voltage	$I_E = -10 \text{ A}$ $I_B = 0$ (see Notes 4 and 5)			-3.5	V

NOTES: 4. These parameters must be measured using pulse techniques, $t_p = 300 \mu\text{s}$, duty cycle $\leq 2\%$.

5. These parameters must be measured using voltage-sensing contacts, separate from the current carrying contacts.

thermal characteristics

PARAMETER	MIN	TYP	MAX	UNIT
$R_{\theta JC}$ Junction to case thermal resistance			1	°C/W
$R_{\theta JA}$ Junction to free air thermal resistance			35.7	°C/W

TYPICAL CHARACTERISTICS

**TYPICAL DC CURRENT GAIN
VS
COLLECTOR CURRENT**

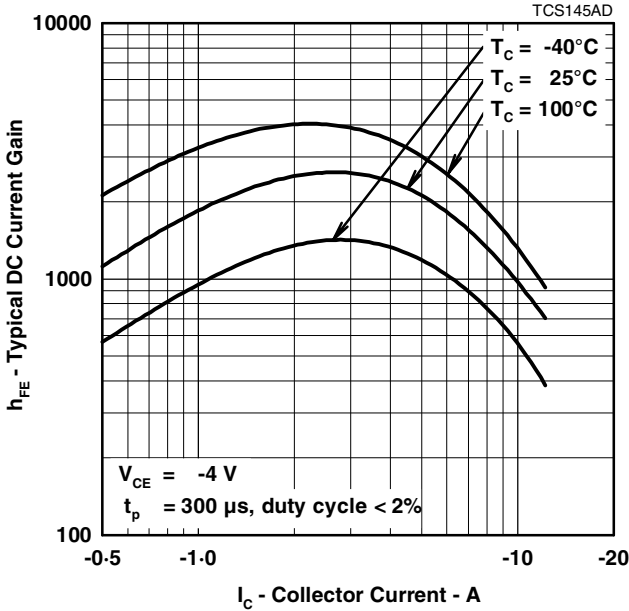


Figure 1.

**COLLECTOR-EMITTER SATURATION VOLTAGE
VS
COLLECTOR CURRENT**

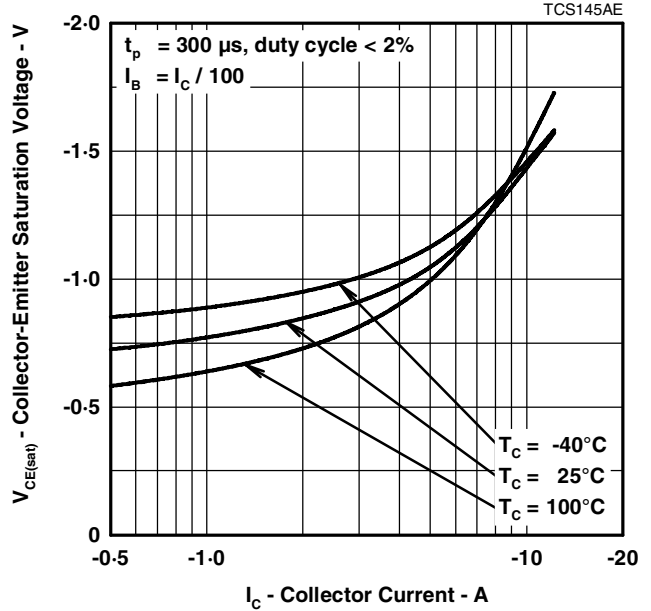


Figure 2.

**BASE-EMITTER SATURATION VOLTAGE
VS
COLLECTOR CURRENT**

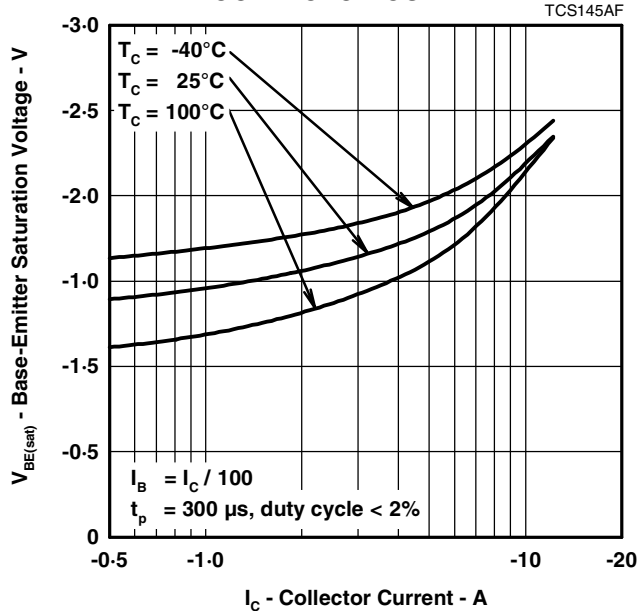


Figure 3.

PRODUCT INFORMATION

THERMAL INFORMATION

**MAXIMUM POWER DISSIPATION
vs
CASE TEMPERATURE**

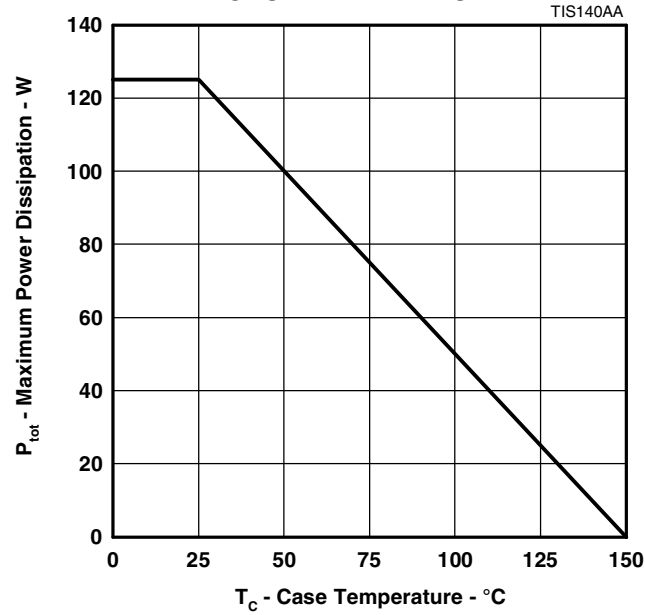


Figure 4.

Mouser Electronics

Authorized Distributor

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