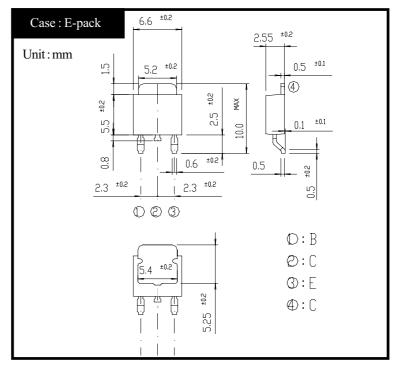
Switching Power Transistor

2SC4669 (TE10S4)

10A NPN

OUTLINE DIMENSIONS



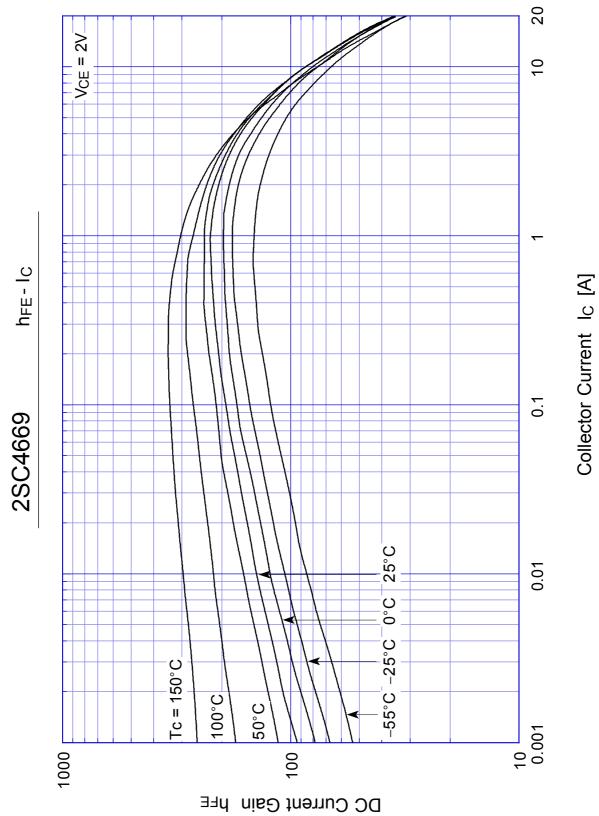
RATINGS

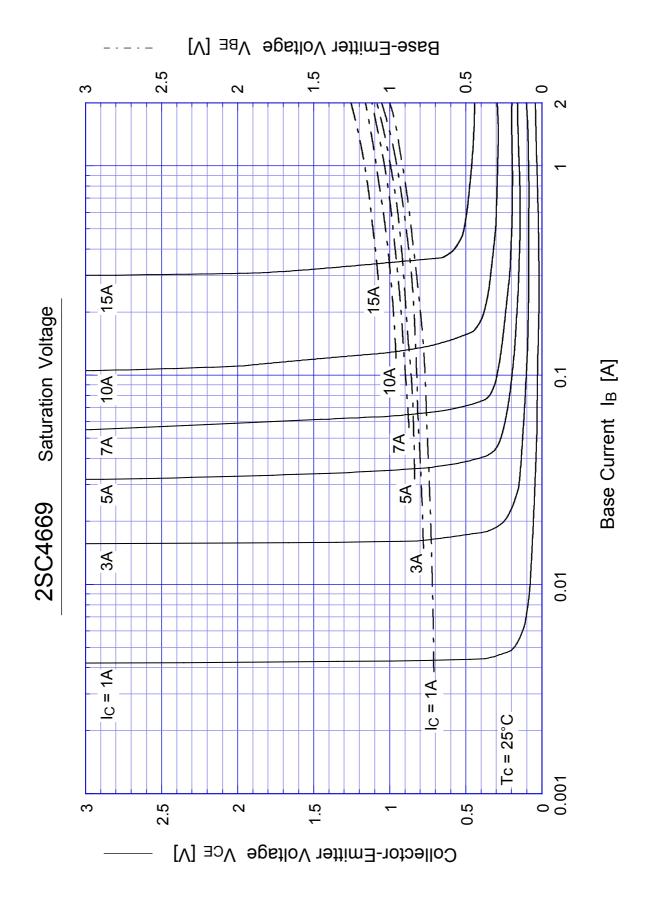
Absolute Maximum Ratings

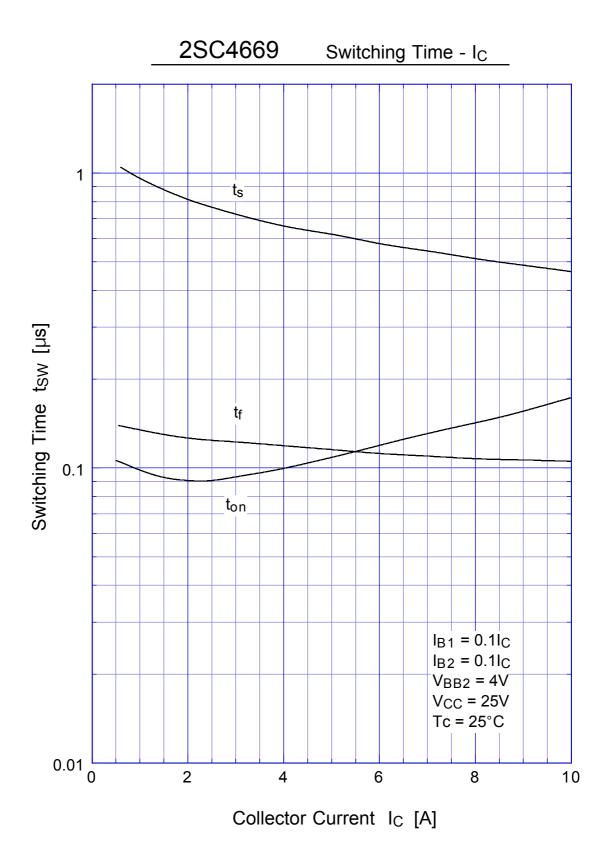
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	$^{\circ}\!\mathbb{C}$
Junction Temperature	Tj		150	$^{\circ}\!\mathbb{C}$
Collector to Base Voltage	$V_{c_{\mathrm{BO}}}$		60	V
Collector to Emitter Voltage	V_{ceo}		40	V
Emitter to Base Voltage	V_{EBO}		7	V
Collector Current DC	I _C		10	Α
Collector Current Peak	I _{CP}		20	Α
Base Current DC	\mathbf{I}_{B}		1.5	Α
Base Current Peak	\mathbf{I}_{BP}		2	Α
Total Transistor Dissipation	P_{T}	Tc = 25℃	10	W

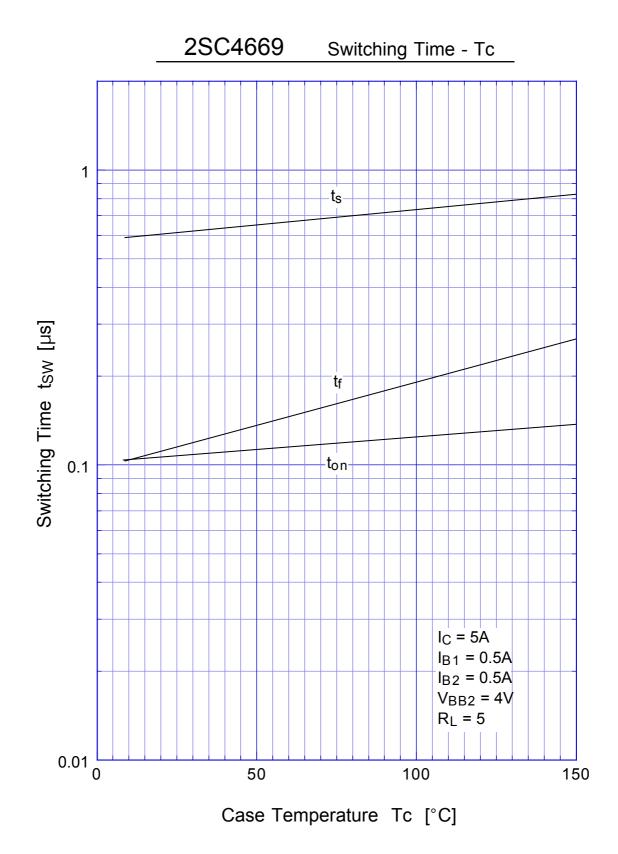
● Electrical Characteristics (Tc=25°C)

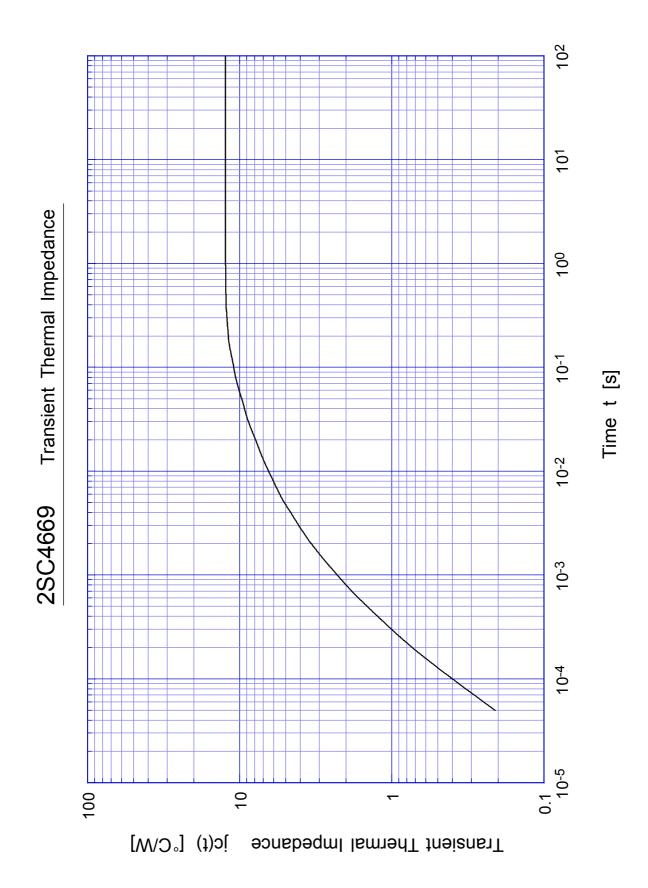
Item	Symbol	Conditions	Ratings	Unit
Collector to Emitter Sustaining Voltage	$ m V_{CEO}(sus)$	$I_C = 0.1A$	M in 40	V
Collector Cutoff Current	I _{CBO}	At rated Voltage	Max 0.1	mA
	I _{ceo}		Max 0.1	
Emitter Cutoff Current	$\mathbf{I}_{\mathrm{EBO}}$	At rated Voltage	Max 0.1	mA
DC Current Gain	$h_{ ext{FE}}$	$V_{CE} = 2V$, $I_C = 5A$	M in 70	
Collector to Emitter Saturation Voltage	$V_{ extsf{CE}}(extsf{sat})$	$I_C = 5A$	Max 0.3	V
Base to Emitter Saturation Voltage	$ m V_{BE}$ (sat)	$I_{\mathrm{B}} = 0.5$ A	Max 1.2	V
Thermal Resistance	θ jc	Junction to case	Max 12.5	°C/W
Transition Frequency	f_{T}	$V_{CE} = 10V$, $I_C = 1A$	TYP 50	\mathbf{M} Hz
Turn on Time	ton		Max 0.3	
		$I_C = 5A$		
Storage Time	ts	$I_{B1} = 0.5A$, $I_{B2} = 0.5A$	Max 1.5	μ s
		$egin{aligned} \mathbf{I}_{\mathrm{B1}} &= 0.5 \mathbf{A}, \ \mathbf{I}_{\mathrm{B2}} &= 0.5 \mathbf{A} \\ \mathbf{R}_{\mathrm{L}} &= 5 \Omega , \ \mathrm{V}_{\mathrm{BB2}} &= 4 \mathrm{V} \end{aligned}$		
Fall Time	tf	7	Max 0.5	

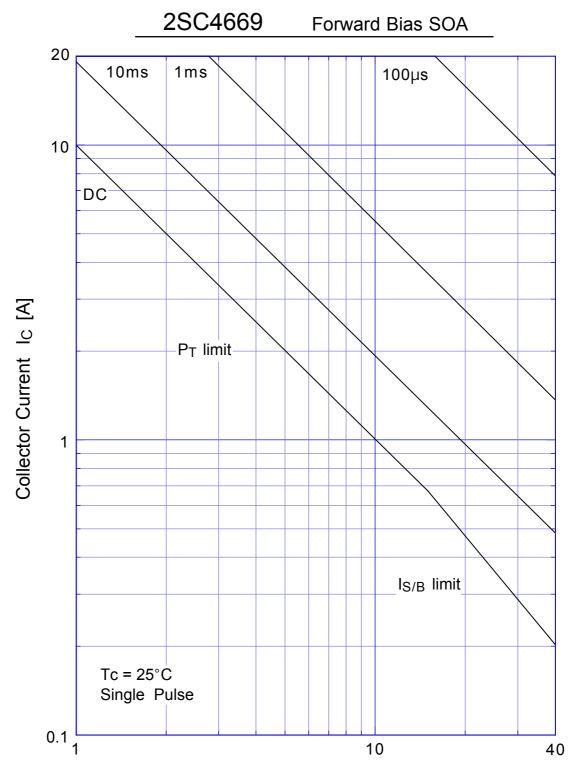












Collector-Emitter Voltage V_{CE} [V]

