

Surface-mount Power Transistor SSD103

Absolute Maximum Ratings (Ta=25°C)

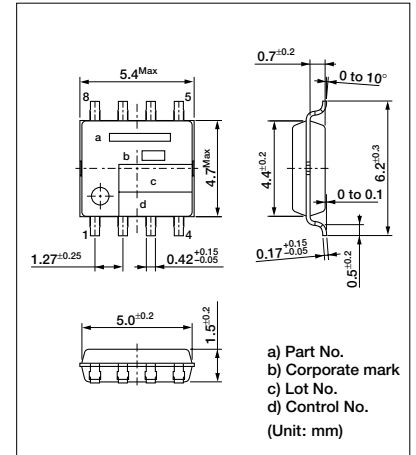
Symbol	Ratings	Unit
VCBO	65±5	V
VCEO	65±5	V
VEBO	6	V
IC	6	A
IC (pulse)	10 (Pw≤1mS, Duty≤25%)	A
IB	10	A
PC	1.5*1	W
TJ	150	°C
Tstg	-55 to +150	°C

*1: FR4 70mm×100mm×1.6mm
(drain heatsink copper foil area 25×25mm)

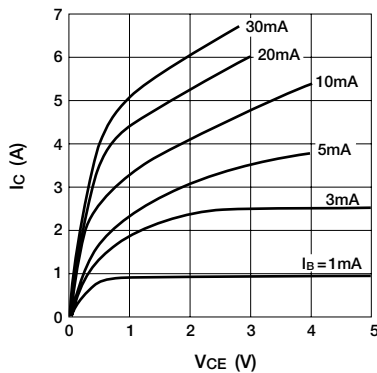
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
ICBO	VCB = 60V, IE = 0A			10	μA
IEBO	VEB = 6V, IC = 0A			10	μA
VCEO	IC = 50mA	60	65	70	V
hFE	VCE = 1V, IC = 1A	400	800	1500	
VCE (sat)	IC = 1.5A, IB = 15mA	0.11	0.15		V
VFEC	IFEC = 6A		1.25	1.5	V
Es/b	L = 10mH	80			mJ

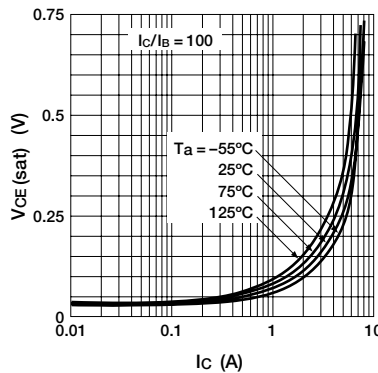
External Dimensions SOP8



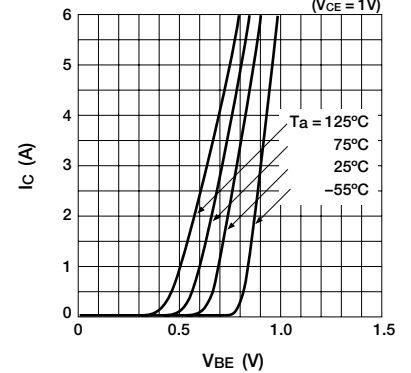
IC—VCE Characteristics (typ.)



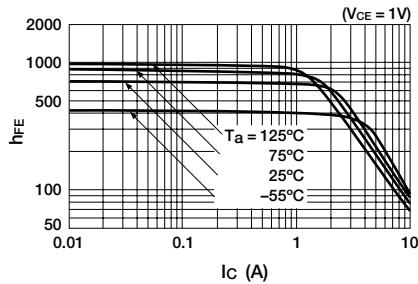
VCE (sat)—IC Temperature Characteristics (typ.)



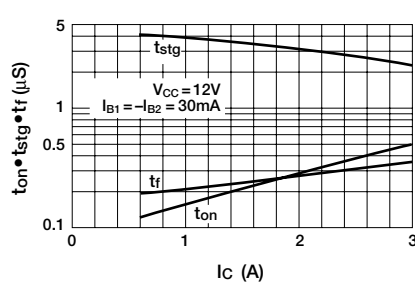
IC—VBE Temperature Characteristics (typ.)



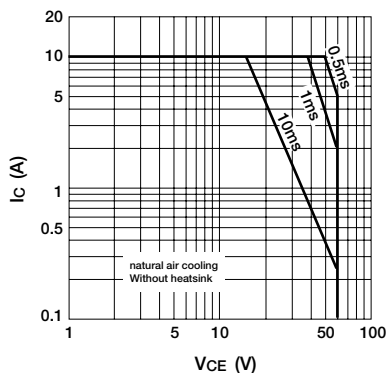
hFE—IC Temperature Characteristics (typ.)



ton•tstg•tr—IC Characteristics (typ.)



Safe Operating Area (Single pulse)



Equivalent Circuit Diagram

