

Surface-mount Power Transistor SSD103

Absolute Maximum Ratings (Ta=25°C)

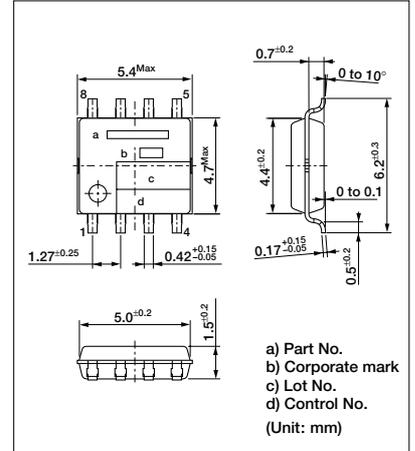
Symbol	Ratings	Unit
Vcbo	65±5	V
Vceo	65±5	V
Vebo	6	V
Ic	6	A
Ic (pulse)	10 (Pw≤1mS, Duty≤25%)	A
Ib	10	A
Pc	1.5*1	W
Tj	150	°C
Tstg	-55 to +150	°C

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

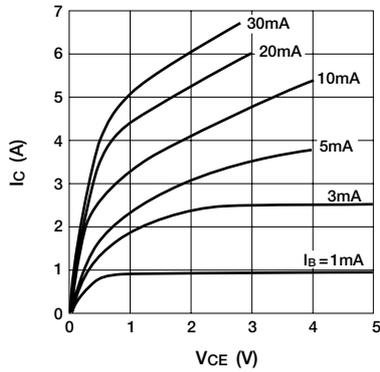
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
ICBO	V _{CB} = 60V, I _E = 0A			10	μA
IEBO	V _{EB} = 6V, I _C = 0A			10	μA
VCEO	I _C = 50mA	60	65	70	V
hFE	V _{CE} = 1V, I _C = 1A	400	800	1500	
VCE (sat)	I _C = 1.5A, I _B = 15mA		0.11	0.15	V
VFEC	I _{FEC} = 6A		1.25	1.5	V
Es/b	L = 10mH	80			mJ

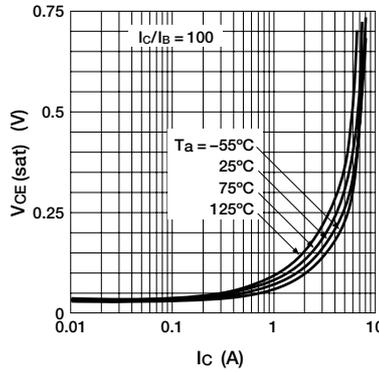
External Dimensions SOP8



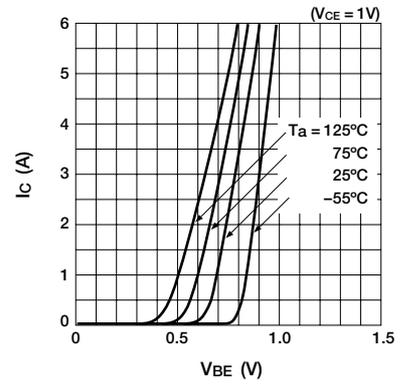
Ic—VCE Characteristics (typ.)



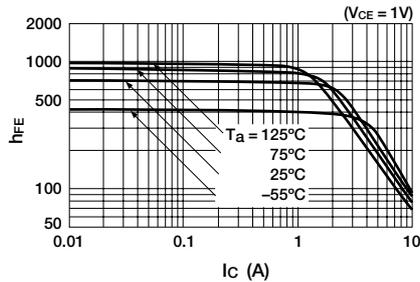
VCE (sat)—Ic Temperature Characteristics (typ.)



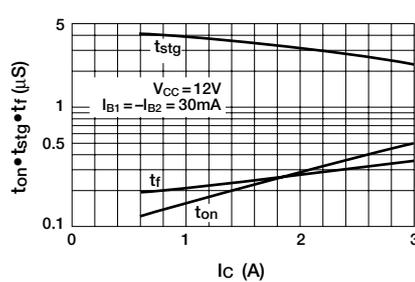
Ic—VBE Temperature Characteristics (typ.)



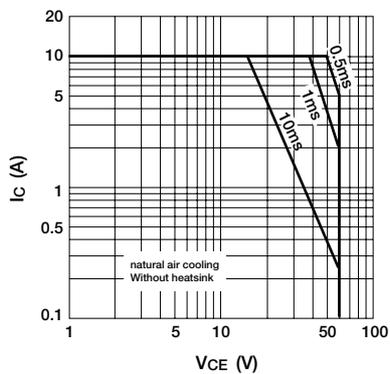
hFE—Ic Temperature Characteristics (typ.)



ton • tstg • tr—Ic Characteristics (typ.)



Safe Operating Area (Single pulse)



Equivalent Circuit Diagram

