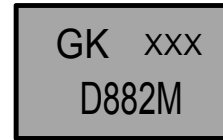
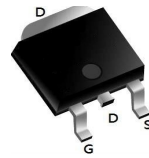


FEATURES

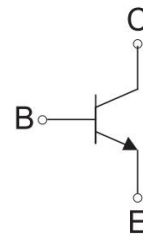
Power Dissipation



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Equivalent Circuit



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

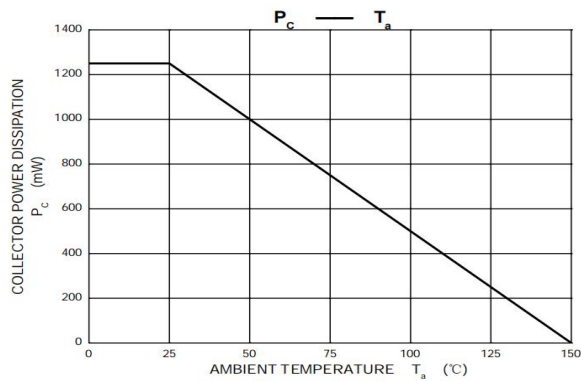
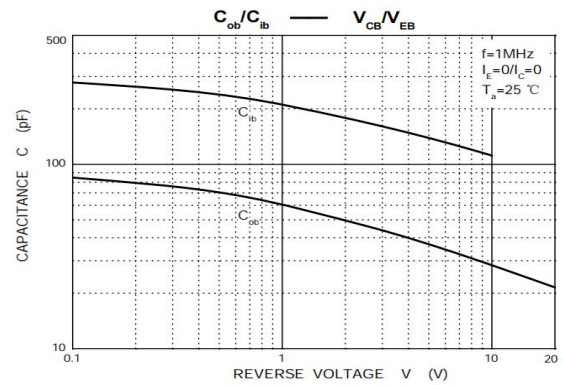
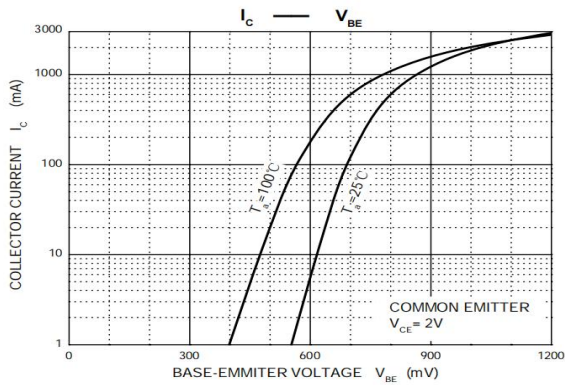
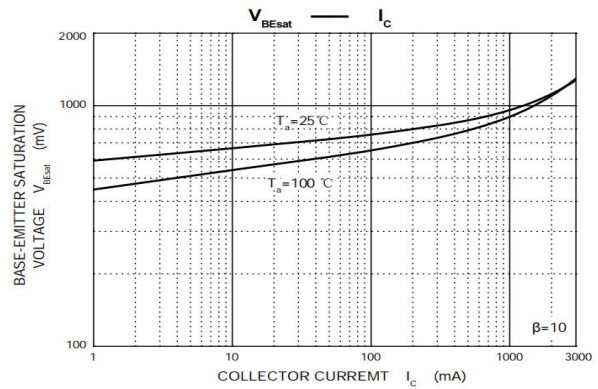
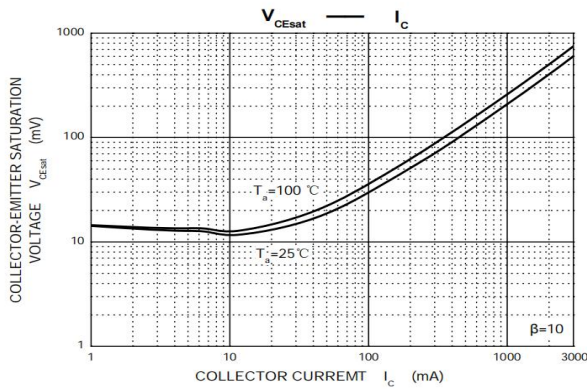
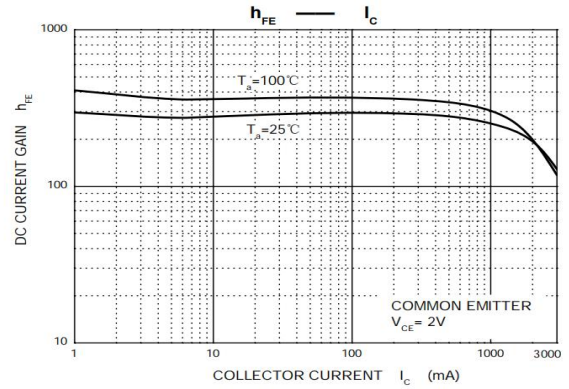
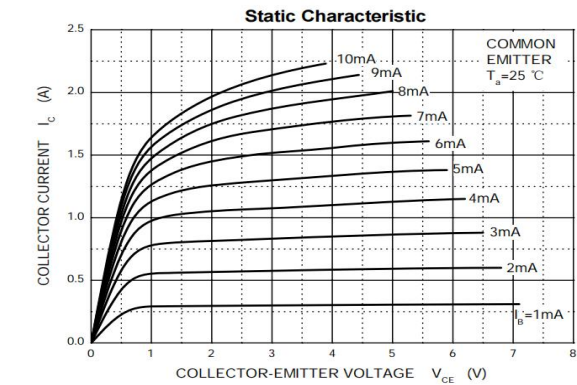
Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	40	V
Collector-Emitter Voltage	VCEO	30	V
Emitter-Base Voltage	VEBO	6	V
Collector Current -Continuous	IC	3	A
Collector Power Dissipation	PC	1.25	W
Operation Junction and Storage Temperature Range	TJ,Tstg	-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC = 100μA, IE=0	40			V
Collector-emitter breakdown voltage	V(BR)CEO	IC = 10mA, IB=0	30			V
Emitter-base breakdown voltage	V(BR)EBO	IE= 100μA, IC=0	6			V
Collector cut-off current	ICBO	VCB= 40 V, IE=0			1	μA
Collector cut-off current	ICEO	VCE= 30 V, IB=0			10	μA
Emitter cut-off current	IEBO	VEB= 6 V, IC=0			1	μA
DC current gain	hFE	VCE= 2 V, IC= 1A	60		400	
Collector-emitter saturation voltage	VCE (sat)	IC= 2A, IB= 0.2 A			0.5	V
Base-emitter saturation voltage	VBE (sat)	IC= 2A, IB= 0.2 A			1.5	V
Transition frequency	fT	VCE= 5V, IC=0.1A f =10MHz		90		MHz

RATING AND CHARACTERISTIC CURVES



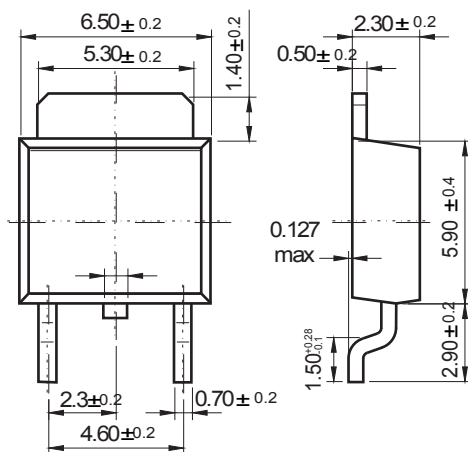
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C

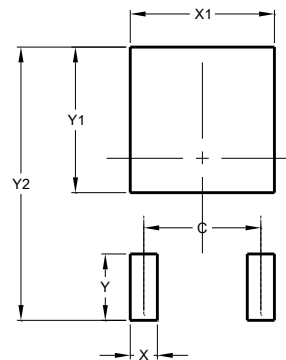


Package Dimensions & Suggested Pad Layout

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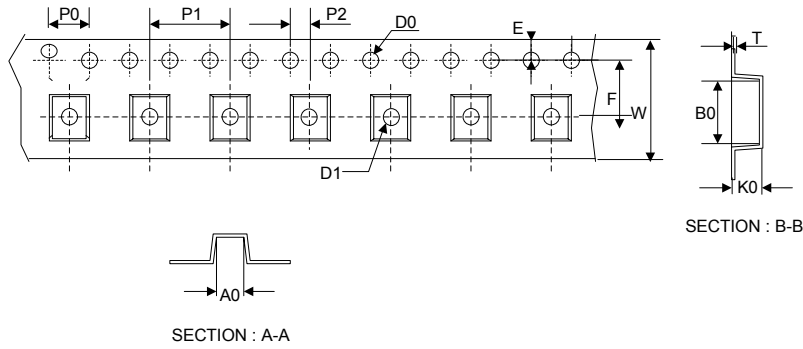
Dimensions in inches and (millimeters)



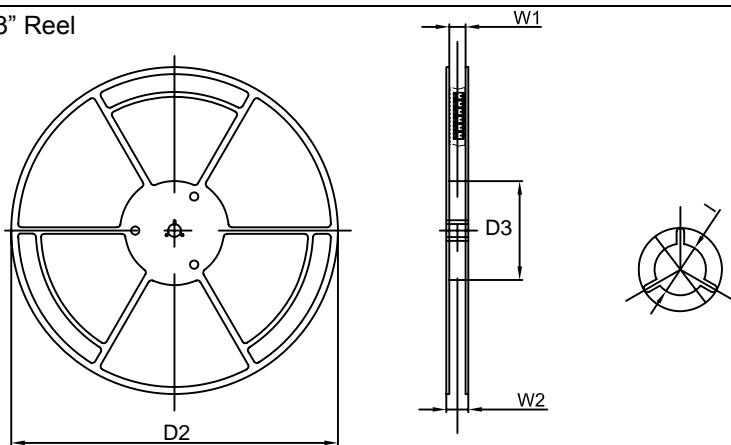
Dimensions	Value (in mm)
C	4.55
X	1.50
X1	5.80
Y	2.70
Y1	6.00
Y2	10.90

Tape & reel specification

Tape



13" Reel



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.55±0.15
D1	1.55±0.20
E	1.75±0.20
F	7.50±0.20
W	16.00±0.20
A0	7.10±0.20
B0	10.50±0.20
K0	2.70±0.20
T	0.30±0.10
D2	330.0±5.0
D3	100.0±4.0
W1	20.0±5.0
W2	25.0±5.0
I	13.0±2.0

Quantity: 2500PCS