



Moisture sensitivity level 1
General switching and amplification
Surface mount package ideally suited for automatic Insertion

Digital applications
Switching loads

SOT-23-3L
Tin plated leads, solderable per
J-STD-002 and JESD22-B102

($T_a=25$ Unless otherwise specified)

Device marking code				64
Collector-base voltage	V_{CC}	V		50
Collector-emitter voltage	V_{IN}	V		-6 to +40
Collector current	I_o	mA		70
Power dissipation	P_D	mW		200
Operation junction temperature	T_J			-55 to +150
Storage temperature	T_{STG}			-55 to +150



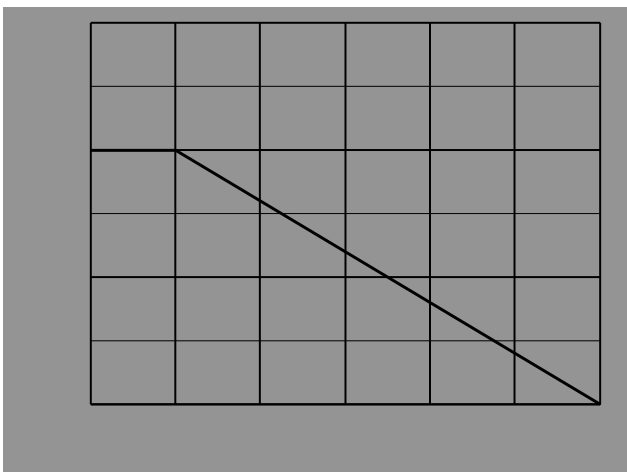
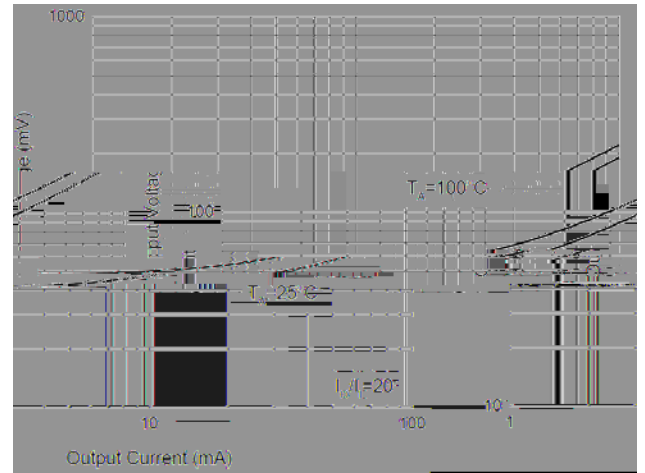
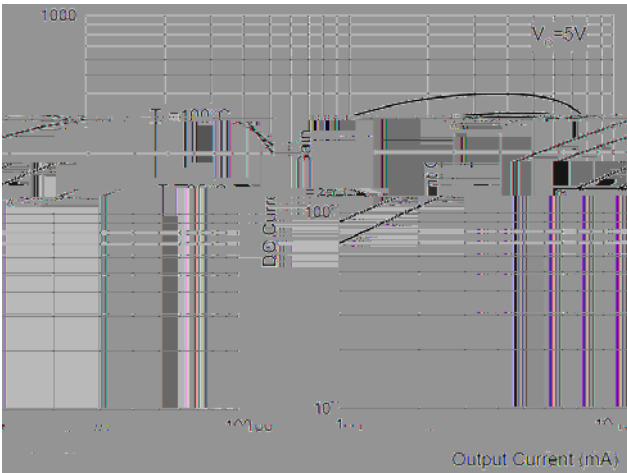
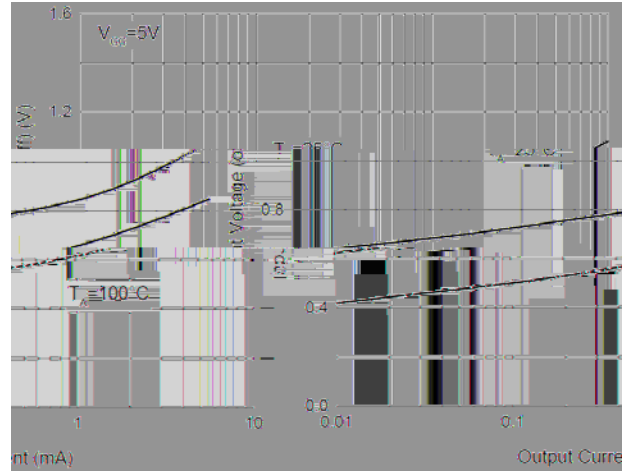
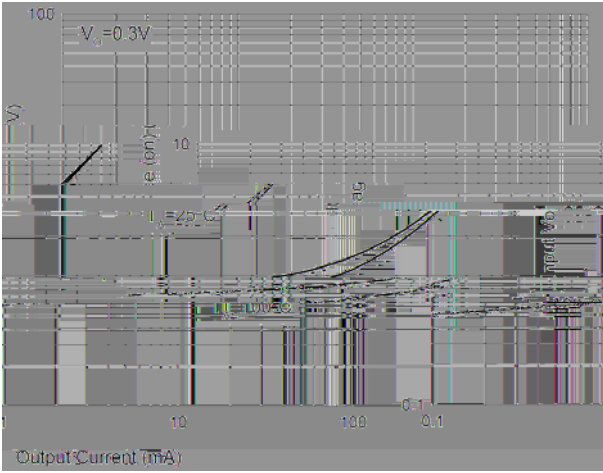
($T_a=25$ Unless otherwise specified)

Input voltage	$V_{I(off)}$	V	$V_{cc}=5V, I_c=100\mu A$	0.3		
	$V_{I(on)}$	V	$V_o=0.3V, I_c=1mA$			1.4
Output voltage	$V_{O(on)}$	V	$I_o / I_i = 5mA / 0.25 mA$			0.3
Input current	I_i	nA	$V_i=5V$			0.88
Output current	$I_{o(off)}$	μA	$V_{cc}=50V, V_i=0$			0.5
DC current gain	G _I		$V_o=5V, I_o=20mA$	68		
Input resistance	R_1	k		7	10	13
Resistance ratio	R_2/R_1			3.7	4.7	5.7
Transition frequency	f _T	MHz	$V_o=10V, I_o=5mA, f=100MHz$		250	

Thermal resistance, junction-to-ambient	$R_{J-A}^{(1)}$	/W	625
Thermal resistance, junction-to-case	$R_{J-C}^{(1)}$	/W	500

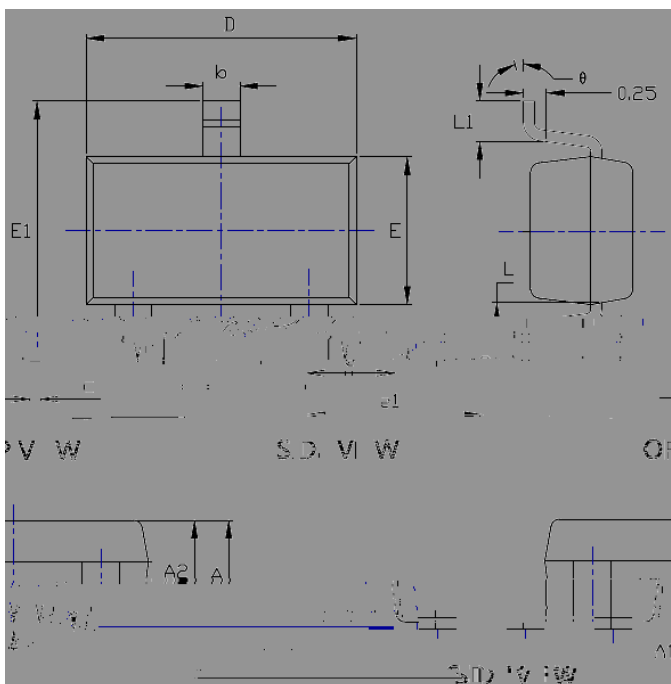
Note:

1 Device mounted on PCB single-sided copper with standard footprint.

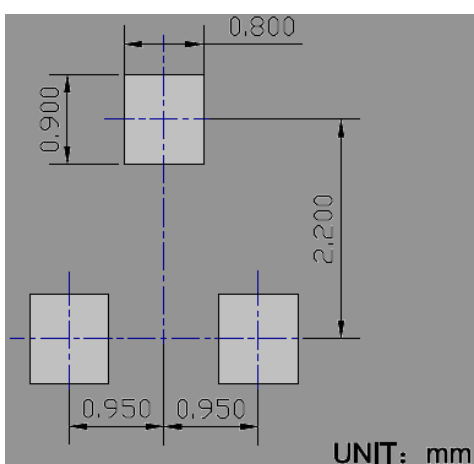




DTC114YKA	F2	Approximate 0.014	3000	30000	120000	7" reel
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SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0,041	0,049	1,050	1,250
A1	0,000	0,008	0,000	0,200
A2	0,041	0,045	1,050	1,150
b	0,010	0,014	0,254	0,350
E	0,010	0,011	0,254	0,279
E1	0,035	0,037	0,889	0,930
L	0,004	0,016	0,100	0,400
L1	0,037	0,079	0,930	1,980
L2	0,034	0,040	0,860	1,010
L3	0,012	0,024	0,300	0,600
theta	0°	8°	0°	0°





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