2SC2216

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

TO-92 NPN

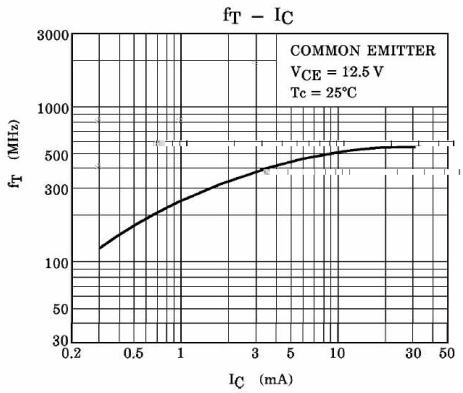
/ Absolute Maximum Ratings(Ta=25)

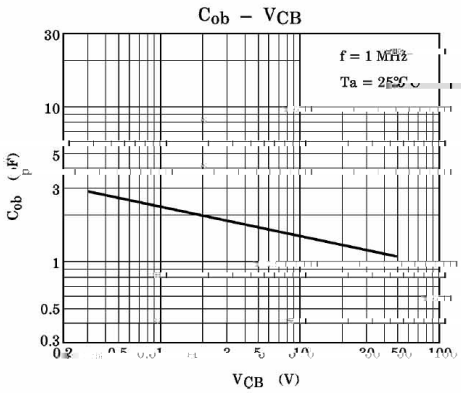
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current - Continuous	I_C	50	mA
Emitter Current - Continuous	I_E	-50	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

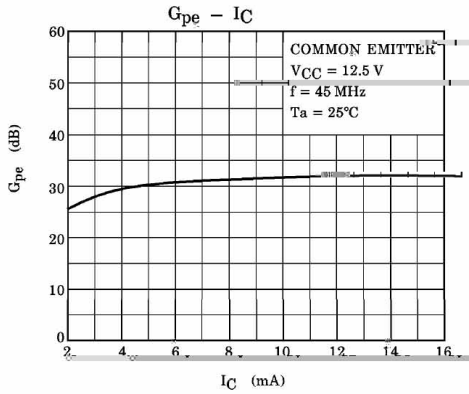
/ Electrical Characteristics(Ta=25)

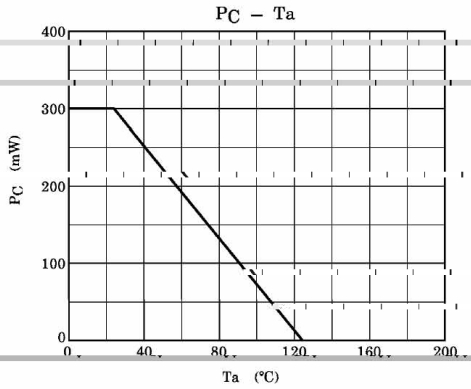
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=10mA I_B=0	45			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=50V I_E=0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=3.0V I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=12.5V I_C=12.5mA	40		140	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=15mA I_B=1.5mA			0.2	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=15mA I_B=1.5mA			1.5	V
Transition Frequency	f_T	V_{CE}=12.5V I_C=12.5mA	300			MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V I_E=0 f=30MHz	0.8		2.0	pF
Power Gain	G_{pe}	V_{CC}=12.5V I_E=-12.5mA f=45MHz	29		36	dB
Collector- Base Time Constant	C_C.rbb′	V_{CB}=10V I_E=-1.0mA f=30MHz			25	ps

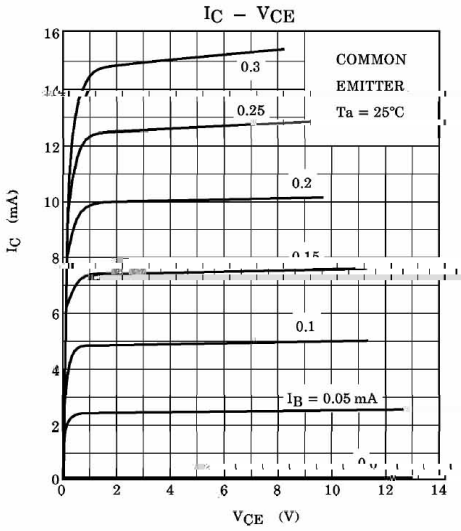
/ Electrical Characteristic Curve

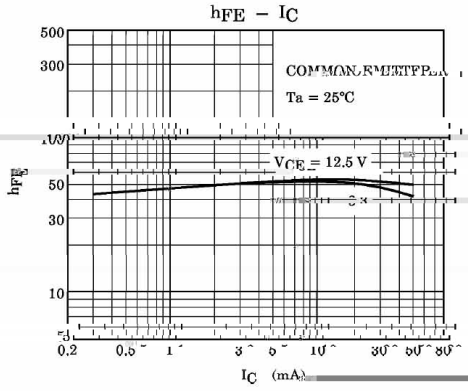




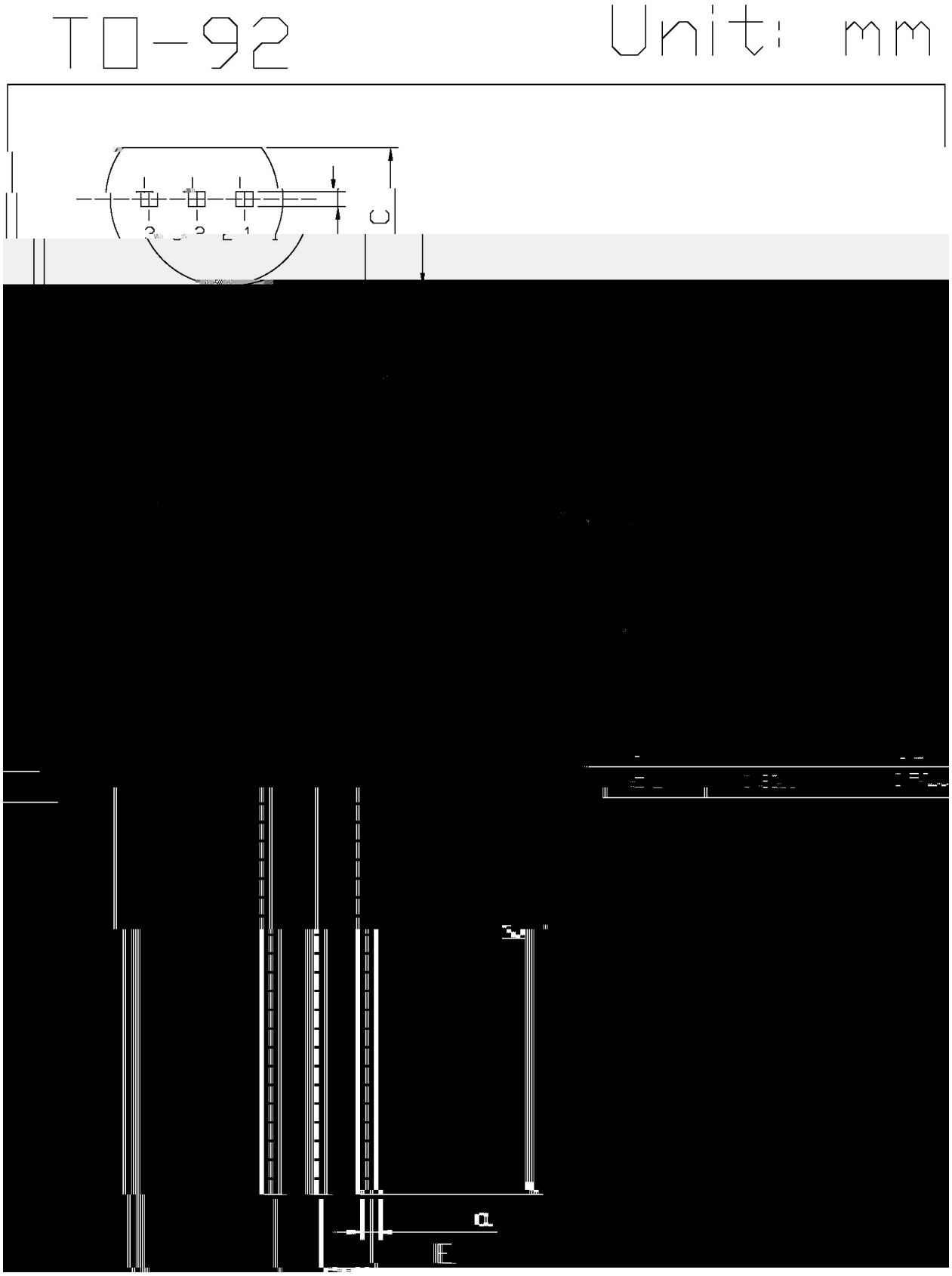




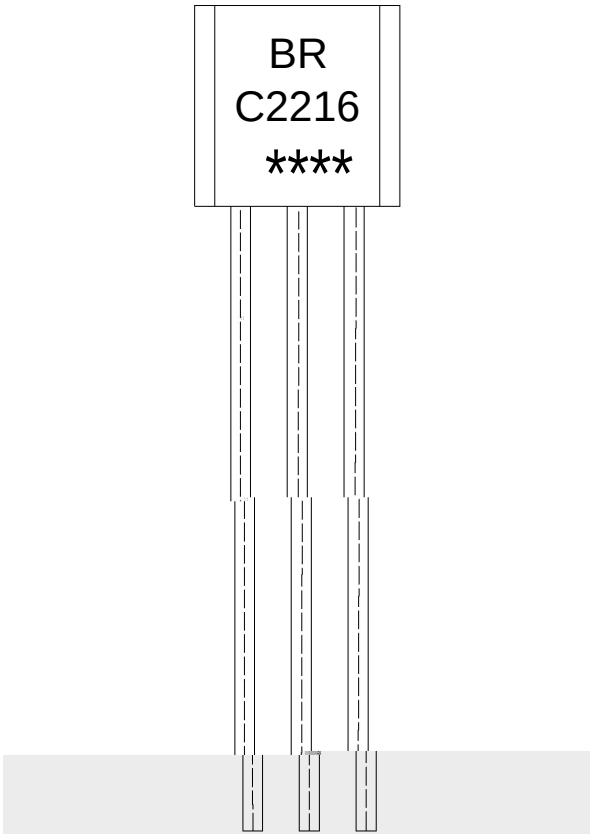




/ Package Dimensions



/ Marking Instructions



BR:

C2216

****

Note:

BR:	Company Code.
C2216:	Product Type.
****:	Lot No. Code,code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



			Note:	
1	25 150	60 90sec;	1.Preheating:25~150	, Time:60~90sec.
2	255±5	5±0.5sec;	2.Peak Temp.:255±5	, Duration:5±0.5sec.
3	2 10 /sec.		3. Cooling Speed: 2~10 /sec.	

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp:270±5	Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type	Units					Dimension	(unit mm3)
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235 547×407×268

/ Notices