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:YUhi fYg`

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High power dissipation capability
- Part no. with suffix "Q" means AEC-Q101 qualified

5dd`]WUh]cb`

- Linear voltage regulators
- Low-side switches
- Battery-driven devices
- MOSFET drivers
- Amplifiers

AYW\Ub]WU` 8UhU`

- DuW_U[Y: SOT-223
- HYf a]bU`g. Tin plated leads, solderable per J-STD-002 and JESD22-B102
- AU`

DF9:9F98`D#B`	D57?-B;` 7C89`	IB=H`K9=: <Hfl[L`	A=B:A I A` D57?5; 9fidWgt`	=BB9F`6CL` E I 5BH=HMfidWgt`	C I H9F`75FHCB` E I 5BH=HMfidWgt`	89@=J9FM`AC89`
BCP53-16Q	F2	Approximate 0.11	2500	5000	25000	13" reel



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AUI]a i a 'FUh]b[g (Ta=25 unless otherwise noted)

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CEO}	V	-80
Collector-Base Voltage	V_{CBO}	V	-100
Emitter-Base Voltage	V_{EBO}	V	-5
Collector Current	I_C	A	-1
Power Dissipation (*)	P_D	W	1.5
Thermal Resistance From Junction To Ambient (*)	R_{JA}	/W	83.3
Thermal Resistance From Junction To Solder Point	R_{JS}	/W	16
Operation Junction Temperature	T_j		-55 to +150
Storage Temperature	T_{stg}		-55 to +150

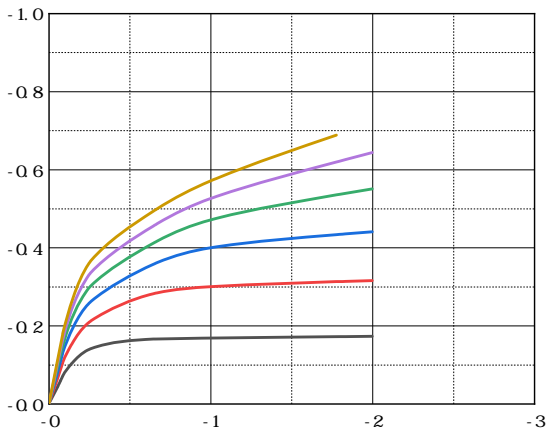
(*) Device mounted on FR-4 PCB 1.575 x 1.575 x 0.0625 inch; mounting pad for collector =0.93 sq in

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Parameter	Symbol	Unit	Test Conditions	Value	HMD	AUI
Collector-base breakdown voltage	V_{CBO}	V	$I_C = -100\text{A}, I_E = 0$	-100	-	-
Collector-emitter breakdown voltage	V_{CEO}	V	$I_C = -10\text{mA}, I_B = 0$	-80	-	-
Emitter-base breakdown voltage	V_{EBO}	V	$I_E = -100\text{A}, I_C = 0$	-5	-	-
Collector-base cut-off current	I_{CBO}	nA	$V_{CB} = -30\text{V}, I_E = 0$	-	-	-100
Collector-emitter cut-off current	I_{EBO}	nA	$V_{EB} = -5\text{V}, I_C = 0$	-	-	-100
DC current gain	h_{FE}		$V_{CE} = -2\text{V}, I_C = -5\text{mA}$	63	-	-
	h_{FE}		$V_{CE} = -2\text{V}, I_C = -150\text{mA}$	100	-	250
	h_{FE}		$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	40	-	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-	-0.5
Base-Emitter Voltage	V_{BE}	V	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	-	-	-1
Collector-Base Capacitance	C_{ob}	pF	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	-	15	-
Transition frequency	f_T	MHz	$V_{CE} = -10\text{V}, I_C = -50\text{mA}, f = 30\text{MHz}$	100	-	-



7 \UfUWhYf]gh]Wg (Typical)



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