



Micro Commercial Components

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**2SC2383-R**  
**2SC2383-O**  
**2SC2383-Y**

## Features

- Capable of 0.9Watts of Power Dissipation.
- Collector-current 1.0A
- Collector-base Voltage 160V
- Operating and storage junction temperature range: -55°C to +150°C
- Marking: C2383
- Case Material:Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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#### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=10mA$ , $I_B=0$ )	160		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100uA$ , $I_E=0$ )	160		Vdc
$V_{(BR)EBO}$	Emitter-Base Voltage ( $I_E=10uA$ , $I_C=0$ )	6.0		Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=150Vdc$ , $I_E=0$ )		1.0	$\mu A$
$I_{CER}$	Collector Cutoff Current ( $V_{CB}=150Vdc$ , $R_{EB}=10m\Omega$ )		10	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=6.0Vdc$ , $I_C=0$ )		1.0	$\mu A$

#### ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain ( $I_C=200mA$ , $V_{CE}=5.0Vdc$ )	60	320	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500mA$ , $I_B=50mA$ )		1.0	Vdc
$V_{BE}$	Base-Emitter Voltage ( $I_C=5.0mA$ , $V_{CE}=5.0Vdc$ )		0.75	Vdc

#### SMALL-SIGNAL CHARACTERISTICS

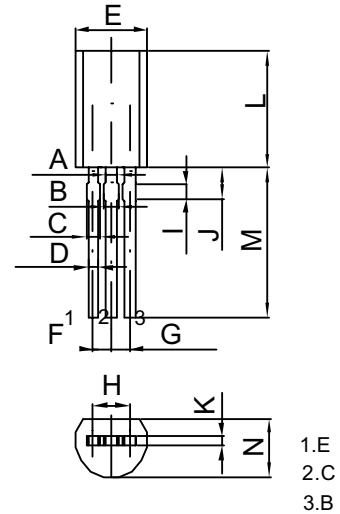
$f_T$	Transistor Frequency ( $I_C=200mA$ , $V_{CE}=5.0Vdc$ )	20		MHz
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#### CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y
Range	60-120	100-200	160-320

**NPN Silicon**  
**Plastic-Encapsulate**  
**Transistor**

TO-92MOD



#### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.030	---	.750	
B	---	.039	---	1.00	
C	---	.031	---	.80	
D	---	.024	---	.060	
E	---	.201	---	5.10	
F	.050		1.27		
G	.050		1.27		
H	.100		2.54		
I	.039		1.00		
J	---	.087	---	2.20	
K	---	.024	---	.60	
L	---	.323	---	8.20	
M	---	.413	---	10.50	
N	---	.161	---	4.10	

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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;500pcs/Bag

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