

2SD2318

- 1) High DC current gain.
- 2) Low saturation voltage.
(Typ. $V_{CE(sat)} = 0.5V$ at $I_C / I_B = 2A / 0.5A$)
- 3) Complements the 2SB1639.

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CB0}	80	V
Collector-emitter voltage	V_{CE0}	60	V
Emitter-base voltage	V_{EB0}	6	V
Collector current	I_c	3	A
		4.5	A(Pulse) ★
Collector power dissipation	P_c	1	W
		15	W($T_c=25^{\circ}\text{C}$)
Junction temperature	$T_{j\text{}}$	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	$-55 \sim +150$	$^{\circ}\text{C}$

The drawing shows the mechanical specifications for the ROHM CPT3 EIAJ SC-63 package. The top view (left) shows a rectangular package with dimensions: total width 2.3 mm, base width 0.65 mm, and a central gate width of 0.9 mm. The side view (right) shows a package with a total height of 2.3 mm, a base thickness of 0.5 mm, and a central gate height of 0.9 mm. The package is labeled with (3) (2) (1) on the top view and (1) (2) (3) on the side view.

ROHM : CPT3
EIAJ : SC-63

- (1) Base/Gate
- (2) Collector/Drain
- (3) Emitter/Source

Type	2SD2318
Package	CPT3
hFE	UV
Code	TL
Basic ordering unit (pieces)	2500

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	80	-	-	V	$I_C=50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	60	-	-	V	$I_C=1mA$
Emitter-base breakdown voltage	BV_{EBO}	6	-	-	V	$I_E=50\mu A$
Collector cutoff current	I_{CBO}	-	-	100	μA	$V_{CB}=80V$
Emitter cutoff current	I_{EBO}	-	-	100	μA	$V_{EB}=6V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	1.0	V	$I_C/I_E=2A/0.05A$
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-	1.5	V	$I_C/I_E=2A/0.05A$
DC current transfer ratio	h_{FE}	560	-	1800	-	$V_{CE}=4V/0.5A$
Transition frequency	f _T	-	50	-	MHz	$V_{CE}=5V, I_E=-0.2A, f=10MHz$
Output capacitance	C _{ob}	-	60	-	pF	$V_{CB}=10V, I_E=0A, f=1MHz$

* Measured using pulse current.