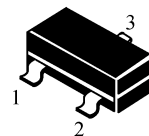


KEL[®]

C3875S

SOT-23

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR



■ MAXIMUM RATINGS (T_a=25°C) 最大額定值

Characteristic 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Collector-Base Voltage 集電極-基極電壓	V _{CBO}	60	V
Collector-Emitter Voltage 集電極-發射極電壓	V _{CEO}	50	V
Emitter-Base Voltage 發射極-基極電壓	V _{EBO}	5	V
Collector Current-Continuous 集電極電流-連續	I _c	150	mA
Collector Power Dissipation 集電極耗散功率	P _C	225	mW
Junction Temperature 結溫	T _j	150	°C
Storage Temperature Range 儲存溫度	T _{stg}	-55~150	°C

■ DEVICE MARKING 打標

C3875S	O	Y	GR	BL
MARK	ALO	ALY	ALG	ALL
H _{FE}	70~140	120~240	200~400	350~700

KEL C3875S



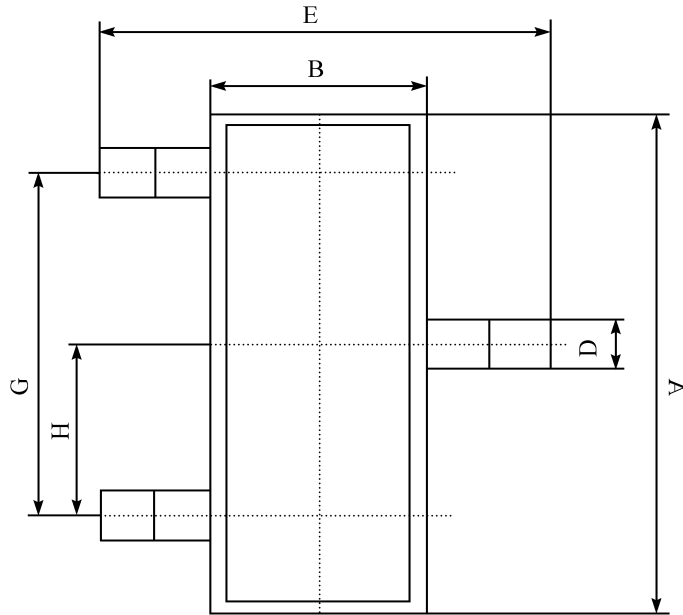
C3875S

■ELECTRICAL CHARACTERISTICS 電特性

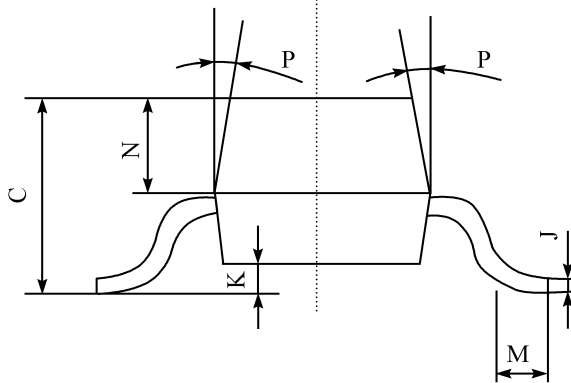
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如無特殊說明,溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Test Condition 測試條件	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Collector Cutoff Current 集電極截止電流	I_{CBO}	$V_{CB}=60\text{V},$ $I_E=0$	—	—	0.1	μA
Emitter Cutoff Current 發射極截止電流	I_{EBO}	$V_{EB}=5\text{V},$ $I_C=0$	—	—	0.1	μA
Collector-Base Breakdown Voltage 集電極-基極擊穿電壓	$V_{(BR)CBO}$	$I_C=100\mu\text{A}$	60	—	—	V
Collector-Emitter Breakdown Voltage 集電極-發射極擊穿電壓	$V_{(BR)CEO}$	$I_C=1.0\text{mA}$	50	—	—	V
Emitter-Base Breakdown Voltage 發射極-基極擊穿電壓	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$	5	—	—	V
DC Current Gain 直流電流增益	H_{FE}	$V_{CE}=6\text{V},$ $I_C=2\text{mA}$	70	—	700	—
Collector-Emitter Saturation Voltage 集電極-發射極飽和壓降	$V_{CE(sat)}$	$I_C=100\text{mA},$ $I_B=10\text{mA}$	—	0.1	0.25	V
Noise Figure 噪声係數	NF	$V_{CE}=6\text{V},$ $I_C=0.1\text{mA},$ $f=1\text{kHz},$ $R_g=10\text{k}\Omega$	—	1.0	10	dB
Transition Frequency 特徵頻率	f_T	$V_{CE}=10\text{V},$ $I_C=1\text{mA}$	80	—	—	MHz
Collector Output Capacitance 輸出電容	C_{ob}	$V_{CB}=10\text{V}, I_E=0,$ $f=1\text{MHz}$	—	2.0	3.5	pF

■ DIMENSION 外形封裝尺寸



序號	數值及公差
A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	$0.00 - 0.10$
M	≥ 0.2
N	0.60 ± 0.10
P	$7 \pm 2^\circ$



This datasheet presents technical data of Tak Cheong's Silicon Rectifier Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

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