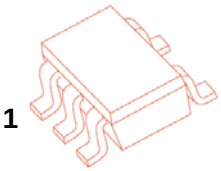
Isolated transistor and diodes

SOT-353

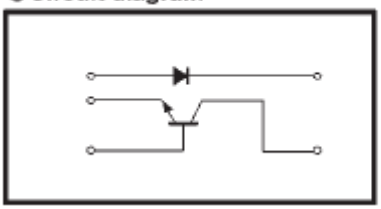


Features

- The 2SC2412K and a diodes are housed independently In a package

MARKING：L2

●Circuit diagram



TR MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	150	mA
P_C	Collector Power Dissipation	150	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55 to150	℃

DIO Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25℃

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	80	V
Peak Reverse Voltage	V_{RM}	80	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	100	mA
Surge current	I_{SURGE}	4	A
Junction temperature	T_j	150	℃
Storage temperature	T_{STG}	-55~+150	℃

TR ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=50μA,I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=60V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=6V,I_C=1mA	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA,I_B=5mA			0.4	V
Transition frequency	f_T	V_{CE}=12V,I_C=2mA,f=100MHz		180		MHz
Collector output capacitance	C_{ob}	V_{CB}=12V,I_E=0,f=1MHz			3.5	pF

DIO Electrical Ratings @T_a=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	I_F=100mA
Reverse current	I_R			0.1	μA	V_R=70V
Capacitance between terminals	C_T			3.5	pF	V_R=6V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	V_R=6V, I_F=5mA,R_L=50Ω