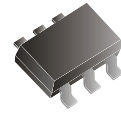


CDSV6-70-G

Forward Current: 150mA

Reverse Voltage: 75V

RoHS Device

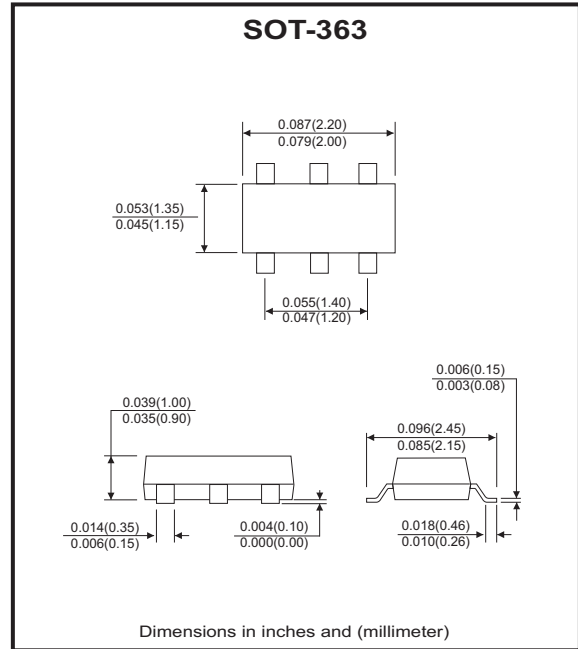


Features

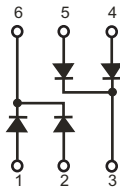
- Fast switching speed.
- Ultra small surface mount package.
- For general purpose switching applications.
- High conductance.

Mechanical data

- Case: SOT-363 Standard package, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Marking code: KJA
- Mounting position: Any.
- Weight: 0.0091 gram (approx.)



Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}	100	
DC blocking voltage	V_R	75	
Forward continuous current	I_{FM}	300	mA
Averaged rectified output current	I_o	150	mA
Non-repetitive peak forward surge current	I_{FSM}	@t=1.0μS 2.0	A
		@t=1.0S 1.0	
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient	$R_{θJA}$	625	°C/W
Operation junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse breakdown voltage	$I_R=2.5\mu A$	$V_{(BR)R}$	75			V
Forward voltage	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$	V_F			715 855 1000 1250	mV
Reverse voltage leakage current	$V_R=75V$ $V_R=20V$	I_R			2.5 0.025	μA
Junction capacitance	$V_R=0V, f=1.0MHz$	C_J			2	pF
Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}			4	nS

ELECTRICAL CHARACTERISTIC CURVES (CDSV6-70-G)

Fig.1 - Forward Characteristics

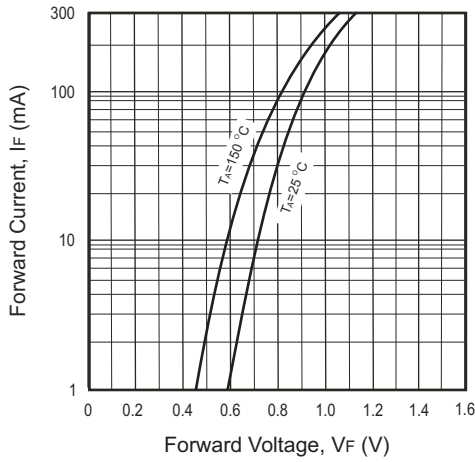


Fig.2 - Reverse Characteristics

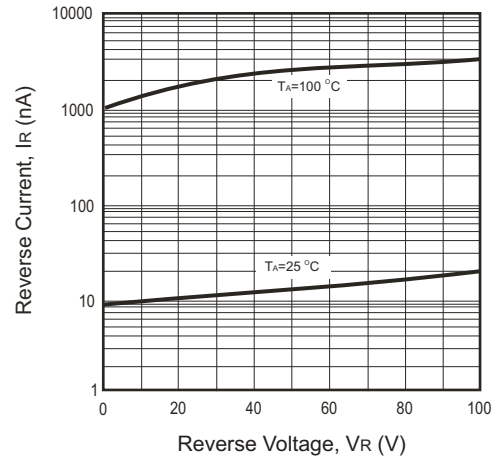


Fig.3 - Capacitance Characteristics

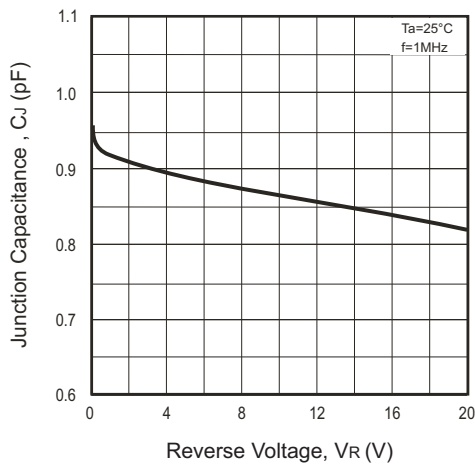
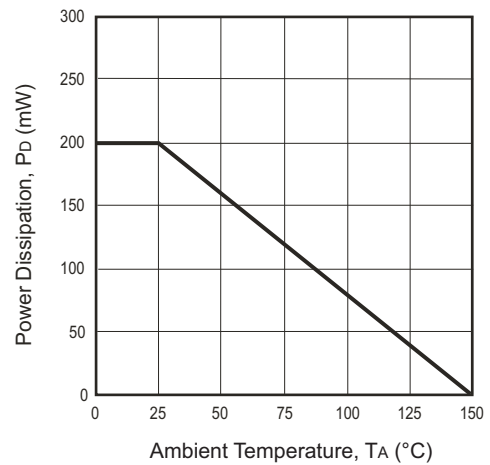
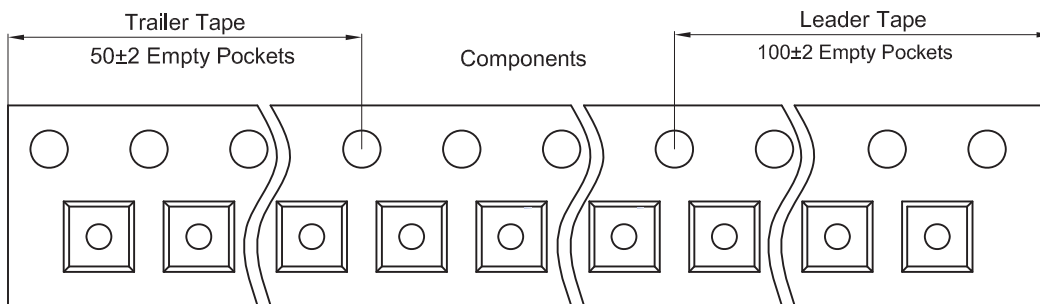
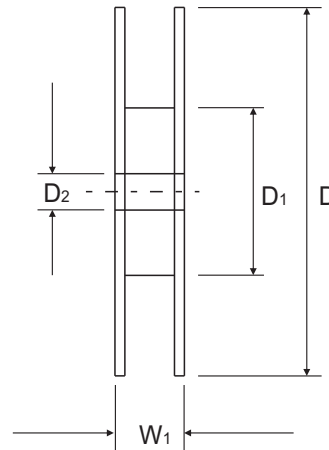
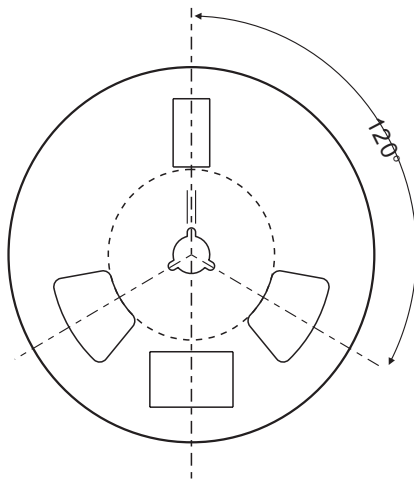
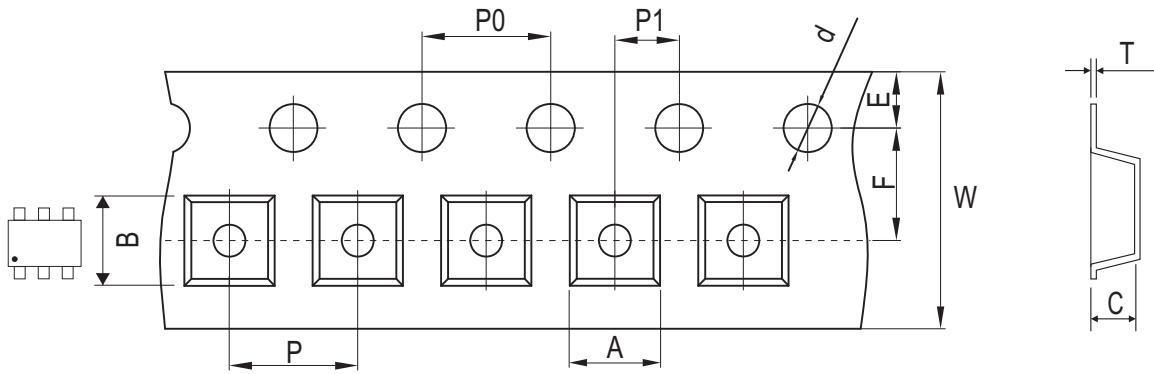


Fig.4 - Power Derating Curve



Reel Taping Specification

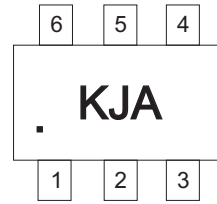


SOT-363	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.05	2.55 ± 0.05	1.20 ± 0.05	1.50 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.089 ± 0.002	0.100 ± 0.002	0.047 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-363	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 / - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.484 ± 0.039

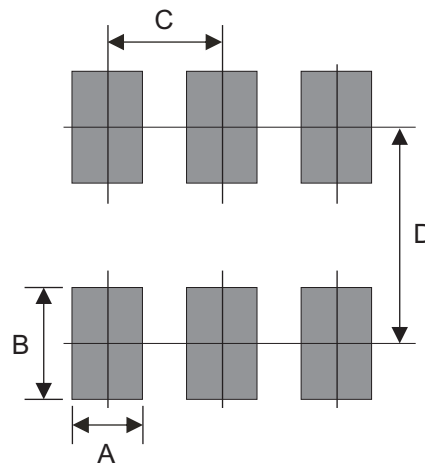
Marking Code

Part Number	Marking Code
CPDV6-70-G	KJA



Suggested PAD Layout

SIZE	SOT-363	
	(mm)	(inch)
A	0.40	0.016
B	0.80	0.031
C	0.65	0.026
D	1.94	0.076



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-363	3,000	7