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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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CDBD620-G Thru. CDBD6100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 6.0 Amp

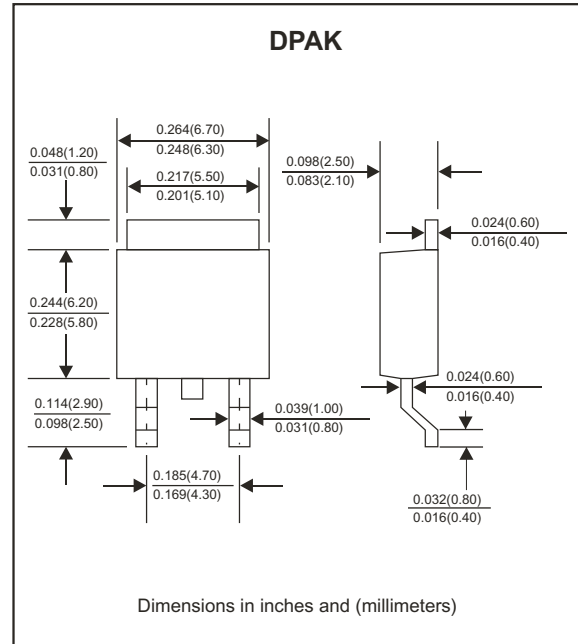
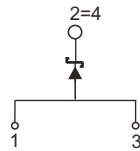
RoHS Device

Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mechanical data

- Case: TO-252/DPAK, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weunting Position: Any
- Weight:0.34 gram(approx.).



Maximum Ratings (At Ta=25°C, unless otherwise noted)

Parameter	Symbol	CDBD 620-G	CDBD 640-G	CDBD 650-G	CDBD 660-G	CDBD 680-G	CDBD 6100-G	Unit	
Repetitive peak reverse voltage	V_{RRM}	20	40	50	60	80	100	V	
Continuous reverse voltage	V_R	20	40	50	60	80	100	V	
RMS voltage	V_{RMS}	14	28	35	42	56	70	V	
Forward rectified current (See fig. 1)	I_o	6.0						A	
Maximum forward voltage $I_F=6.0A$	V_F	0.55		0.75		0.85		V	
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	75						A	
Reverse current	$V_R=V_{RRM}$ $T_A=25^\circ C$	0.5						mA	
	$V_R=V_{RRM}$ $T_A=100^\circ C$	20						mA	
Thermal resistance	Junction to ambient	80						$^\circ C/W$	
	Junction to case	3.0						$^\circ C/W$	
Operating temperature	T_J	-55 to +125			-55 to +150				$^\circ C$
Storage temperature	T_{STG}	-65 to +175						$^\circ C$	

RATING AND CHARACTERISTIC CURVES (CDBD620-G Thru. CDBD6100-G)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

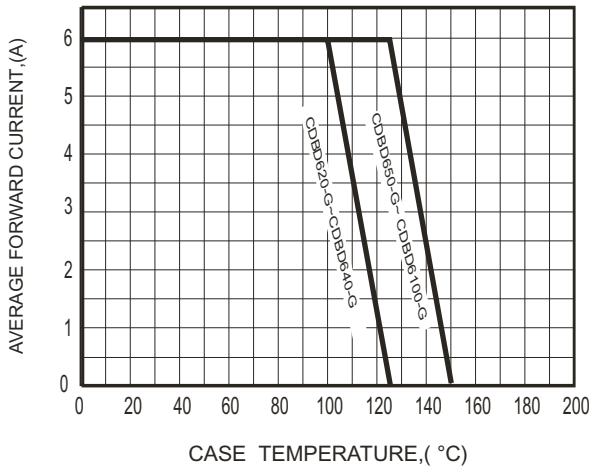


FIG.2-TYPICAL FORWARD CHARACTERISTICS

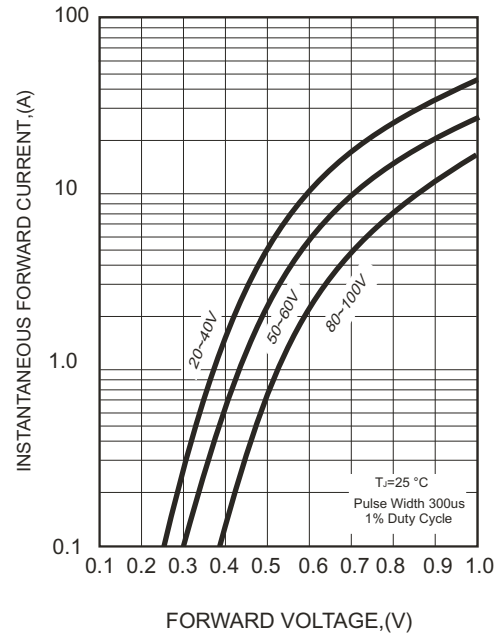


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

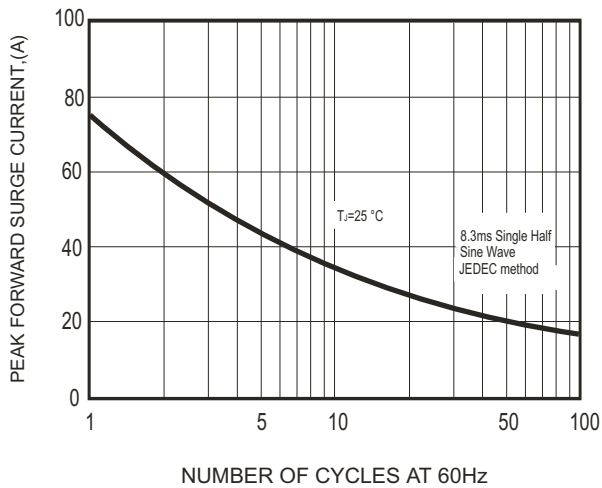
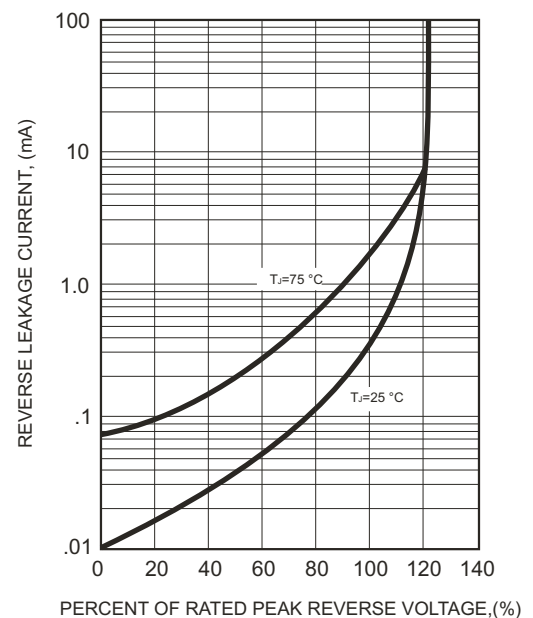
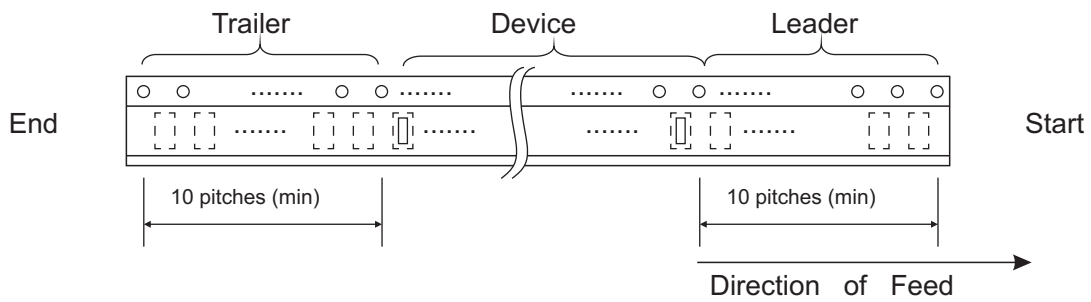
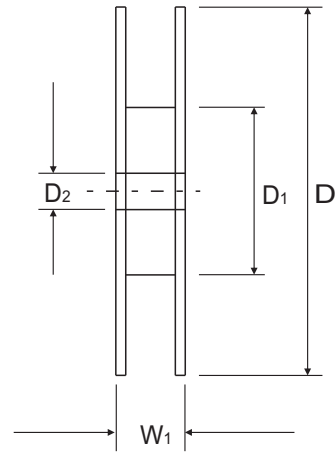
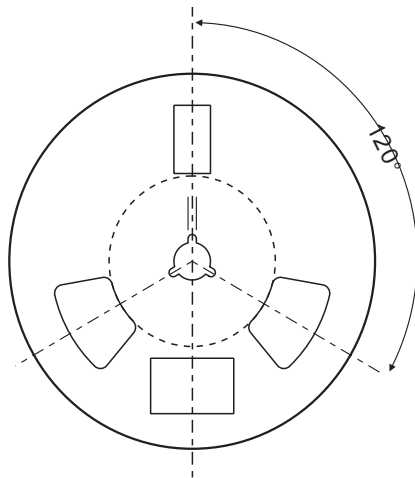
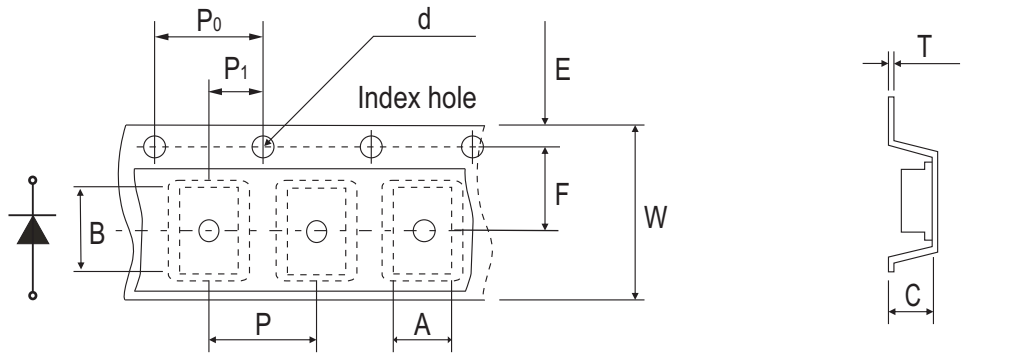


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



Reel Taping Specification

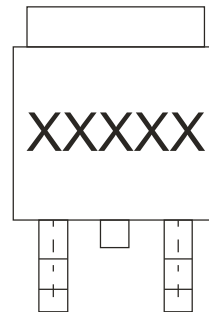


TO-252/DPAK	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	6.90 ± 0.10	10.50 ± 0.10	2.70 ± 0.10	1.50 ± 0.10	330.00 ± 2.00	50.0 MIN.	13.0 ± 0.50
	(inch)	0.272 ± 0.004	0.413 ± 0.004	0.106 ± 0.004	0.059 ± 0.004	13.00 ± 0.079	1.969 MIN.	0.512 ± 0.020

TO-252/DPAK	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	7.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	16.00 ± 0.30	22.00 ± 1.0
	(inch)	0.069 ± 0.004	0.295 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.630 ± 0.012	0.866 ± 0.039

Marking Code

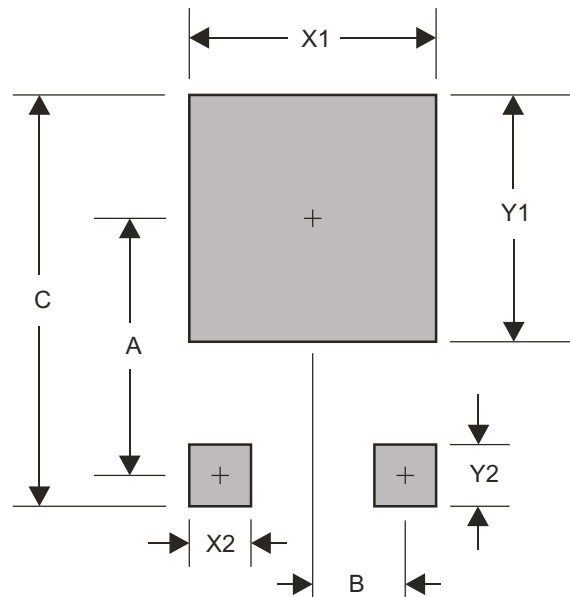
Part Number	Marking Code
CDBD620-G	SK620Y
CDBD640-G	SK640Y
CDBD650-G	SK650Y
CDBD660-G	SK660Y
CDBD680-G	SK680Y
CDBD6100-G	SK6100Y



XXXXXX / XXXXXX = Product type marking code

Suggested PAD Layout

SIZE	TO-252 / DPAK	
	(mm)	(inch)
A	6.90	0.272
B	2.30	0.091
C	11.60	0.457
X1	7.00	0.276
X2	1.50	0.059
Y1	7.00	0.276
Y2	2.50	0.098



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
TO-252/DPAK	3,000	13