



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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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CDBD2040-G Thru. CDBD20200-G

Reverse Voltage: 40 to 200 Volts

Forward Current: 20.0 Amp

RoHS Device

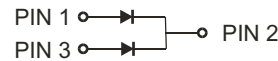
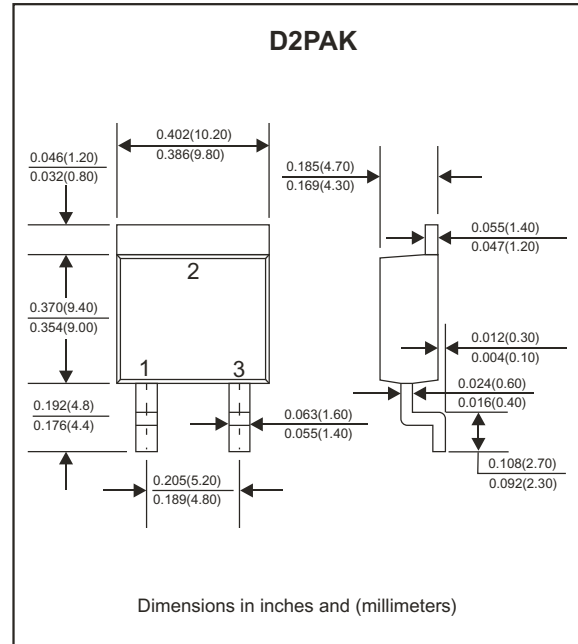


Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guard ring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free part meets environmental standards of MIL-STD-19500 /228

Mechanical data

- Case: TO-263/D2PAK, molded plastic.
- Terminals: Solder plated, Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position: Any
- Weight: 1.46 grams (approx.).



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

Parameter	Symbol	CDBD 2040-G	CDBD 2045-G	CDBD 2060-G	CDBD 20100-G	CDBD 20150-G	CDBD 20200-G	Unit	
Repetitive peak reverse voltage	V_{RRM}	40	45	60	100	150	200	V	
Continuous reverse voltage	V_R	40	45	60	100	150	200	V	
RMS voltage	V_{RMS}	28	31.5	42	70	105	140	V	
Maximum Forward rectified current (See fig. 1)	I_O	20.0						A	
Maximum forward voltage $I_F=10.0A$	V_F	0.55		0.75	0.85	1.00		V	
Maxium forward surge current, 8.3ms singlehalf sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	150						A	
Maximum reverse current	$V_R=V_{RRM}$ $T_A=25^\circ C$	I_R						0.5	mA
	$V_R=V_{RRM}$ $T_A=100^\circ C$	I_R						50	mA
Typical thermal resistance	Junction to Case	$R_{\theta Jc}$						2.0	°C/W
Operating temperature	T_J	-55 to +125			-55 to +150			°C	
Storage temperature	T_{STG}	-65 to +175						°C	

RATING AND CHARACTERISTIC CURVES (CDBD2040-G Thru. CDBD20200-G)

FIG.1- Typical Forward Current De-rating Curve

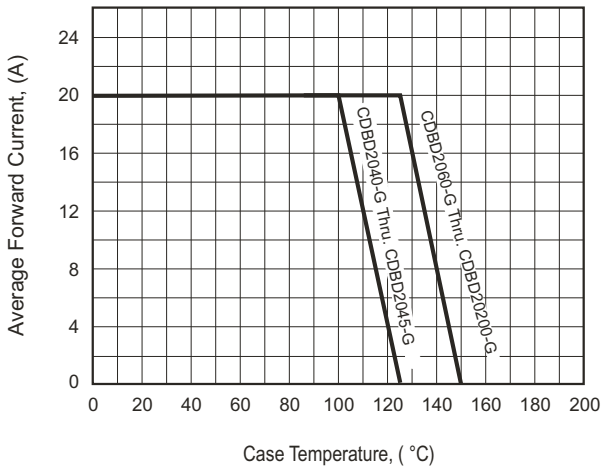


FIG.2- Typical Forward Characteristics

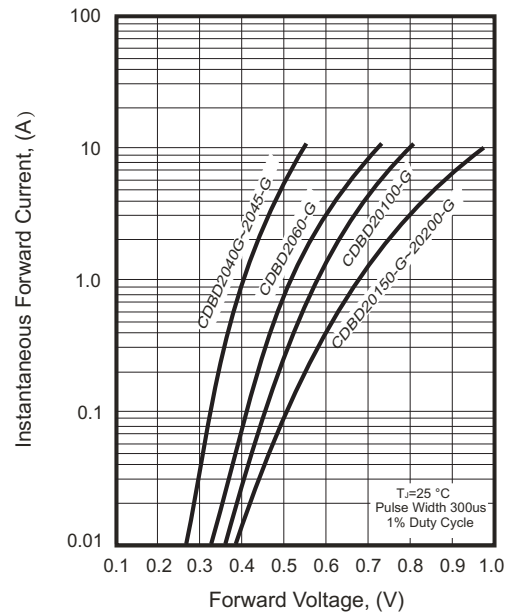


FIG.3- Maximum Non-Repetitive Forward Surge Current

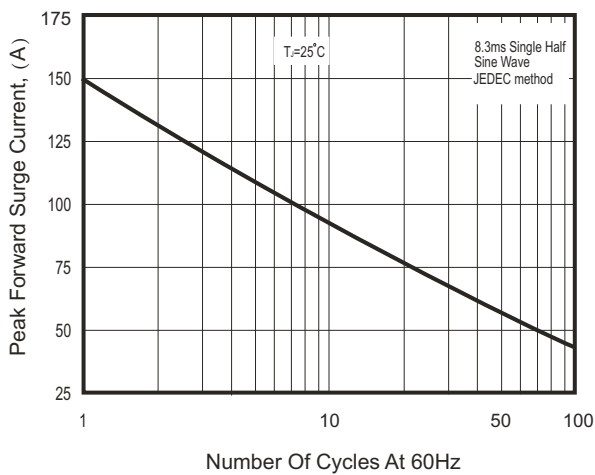
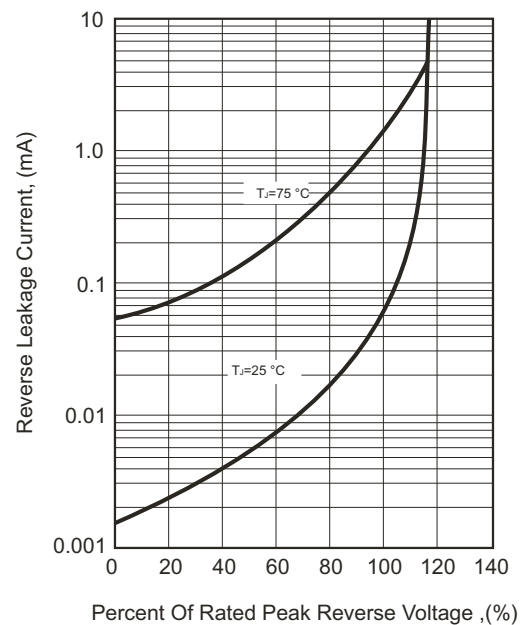
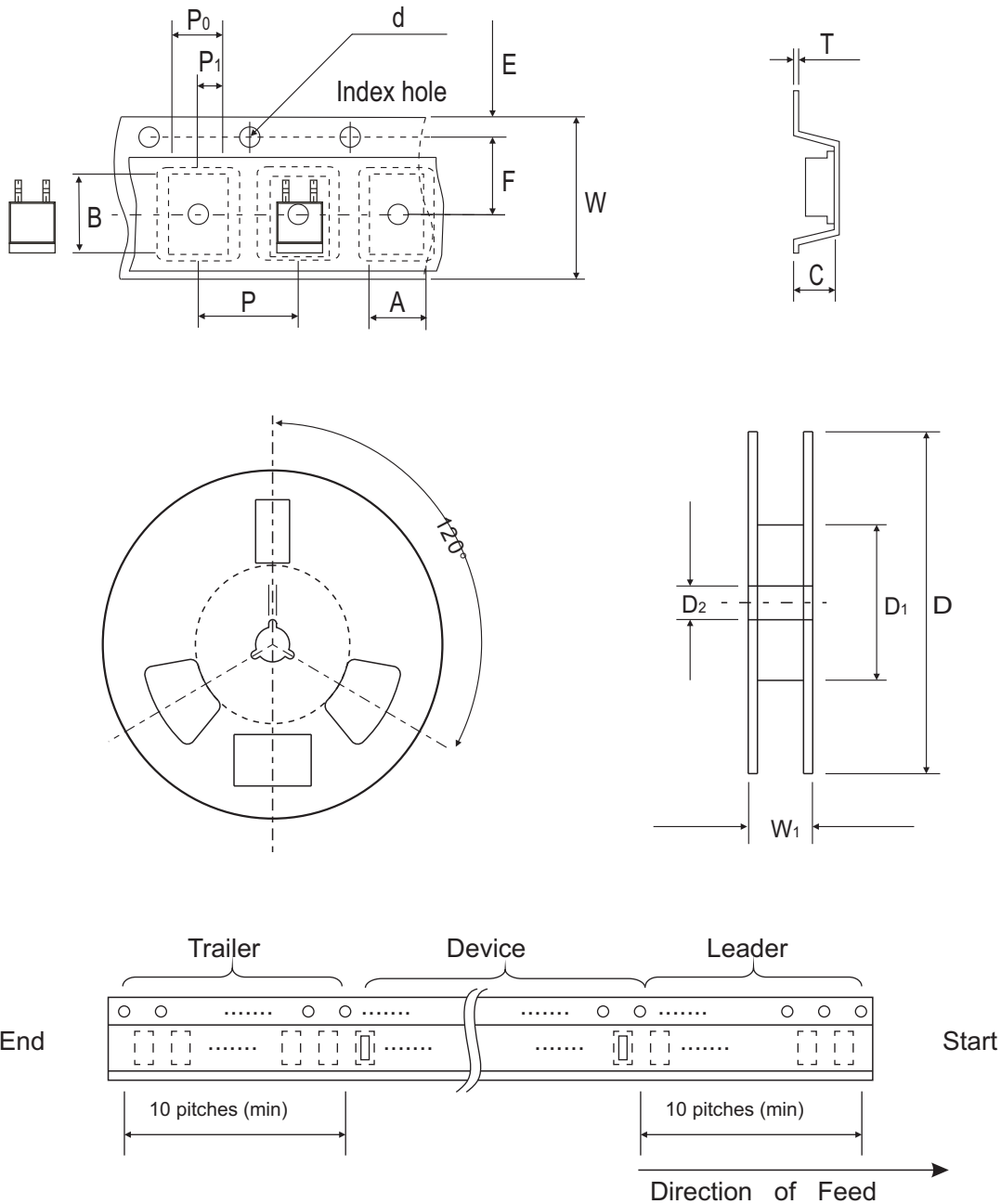


FIG.4 - Typical Reverse Characteristics



Reel Taping Specification



TO-263/D2PAK	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	10.70 ± 0.10	16.30 ± 0.10	5.10 ± 0.10	1.50 ± 0.10	330.00 ± 2.00	50.0 MIN.	13.0 ± 0.50
	(inch)	0.421 ± 0.004	0.642 ± 0.004	0.201 ± 0.004	0.059 ± 0.004	13.00 ± 0.079	1.969 MIN.	0.512 ± 0.020

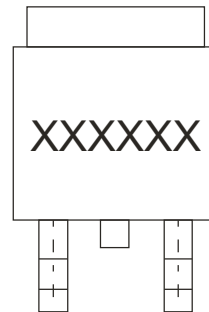
TO-263/D2PAK	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	11.50 ± 0.10	16.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	24.00 ± 0.30	30.00 ± 1.0
	(inch)	0.069 ± 0.004	0.453 ± 0.004	0.630 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.945 ± 0.012	1.181 ± 0.039

Company reserves the right to improve product design, functions and reliability without notice.

REV:C

Marking Code

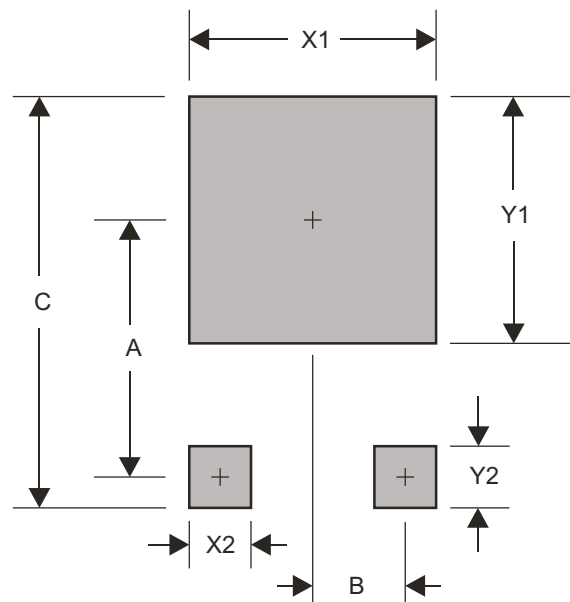
Part Number	Marking Code
CDBD2040-G	SK2040
CDBD2045-G	SK2045
CDBD2060-G	SK2060
CDBD20100-G	SK20100
CDBD20150-G	SK20150
CDBD20200-G	SK20200



XXXXXX / XXXXXXXX = Product type marking code

Suggested PAD Layout

SIZE	TO-263 / D2PAK	
	(mm)	(inch)
A	9.50	0.374
B	2.50	0.098
C	16.90	0.665
X1	10.80	0.425
X2	1.80	0.071
Y1	11.40	0.449
Y2	3.50	0.138



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
TO-263/D2PAK	800	13