

Fast Recovery Diodes

■ $V_{RM}: 100 \sim 1300V$

■Io:4.0~20A

T-03-17
T-23-05
T-23-07

CTU/FMU

Rating/ Characteristics	Absolute Maximum Ratings						Electrical Characteristics (Ta = 25°C)						Others			
	V _{RSM} (V)	V _{RM} (V)	I _O (A)	I _{FSM} (A)	T _J (°C)	T _{stg} (°C)	V _F (V)	I _R (μA)	I _{R(H)} (μA)	t _{rr} (μs)	Outline Drawing	Weight(g)	Taping	Internal Connections		
			With Flt	50Hz Half Sine Wave Pulse Single			Max: per chip	I _F (A)	V _R = V _{RM} max (per chip)	V _R = V _{RM} , Ta = 100°C max(per chip)	I _F /I _{RP} (mA)					
Type No.																
CTU-G2DR	1350	1300	4.0	40	-40 ~ +140		2.0	4.0	100							
CTU-G3DR	1350	1300	6.0	60			6.0									
FMU-11S , R	150	100	5.0	30				2.5								
FMU-12S , R	250	200														
FMU-14S , R	450	400														
FMU-16S , R	650	600														
FMU-21S , R	150	100	10	40	-40 ~ +150		1.5	5.0			100/100					
FMU-22S, R	250	200														
FMU-24S, R	450	400														
FMU-26S, R	650	600														
FMU-31S , R	150	100	20	80				10								
FMU-32S, R	250	200														
FMU-34S, R	450	400														
FMU-36S, R	650	600														
CTU-11S	150	100	6.0	30	-40 ~ +140		2.0		50	500	0.4					
CTU-11R	150	100														
CTU-12S	250	200														
CTU-12R	250	200														
CTU-14S	450	400														
CTU-14R	450	400														
CTU-16S	650	600														
CTU-16R	650	600														
CTU-21S	150	100	8.0	40			5.0				10/10					
CTU-21R	150	100														
CTU-22S	250	200														
CTU-22R	250	200														
CTU-24S	450	400														
CTU-24R	450	400														
CTU-26S	650	600														
CTU-26R	650	600														
CTU-22U	250	200	40 (per chip)													

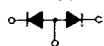


(Center Tap)

S Type



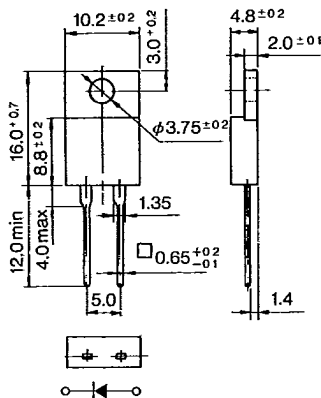
R Type



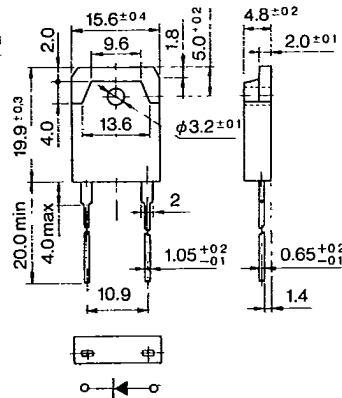
Voltage Doubler Type



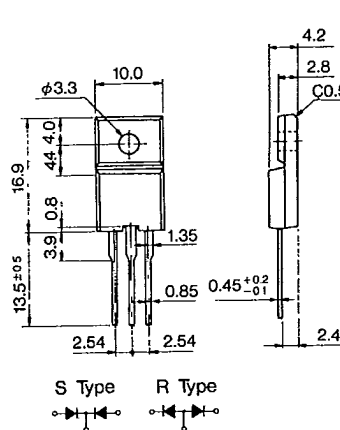
Outline Drawing ④③



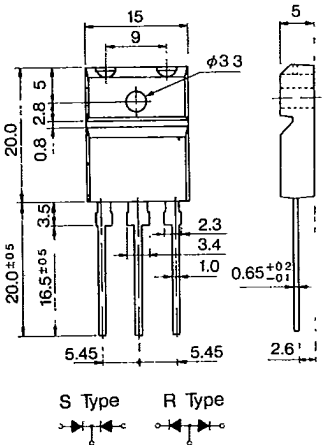
Outline Drawing ④④



Outline Drawing ④5



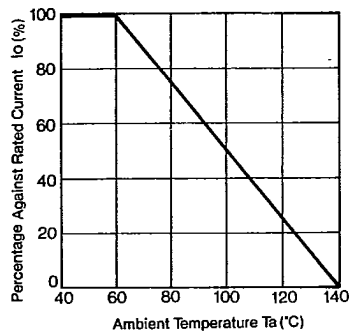
Outline Drawing ④⑥



④3~④6 Plastic Molded Flammability : UL94V-0 or Equivalent

CTU-G2R
CTU-G3R

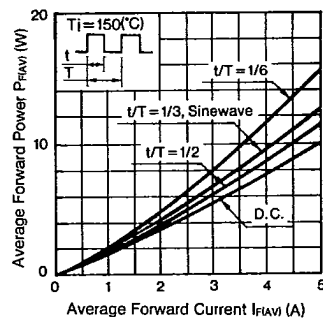
Io - Ta Deratings



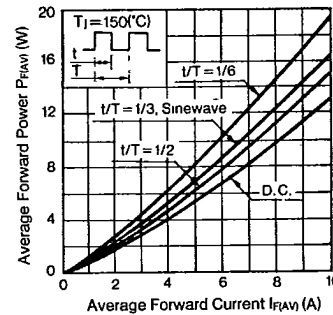
FMU Series

 $P_{F(AV)} - I_{F(AV)}$ Characteristics

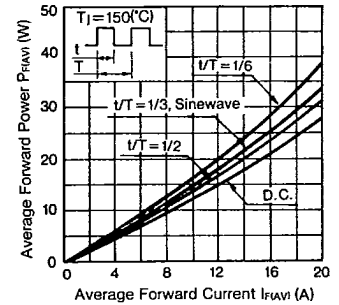
FMU-1



FMU-2

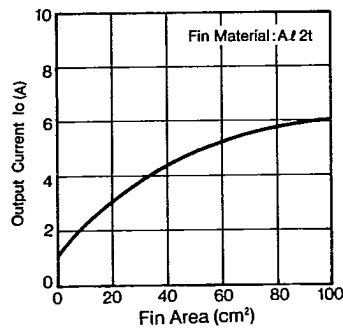


FMU-3

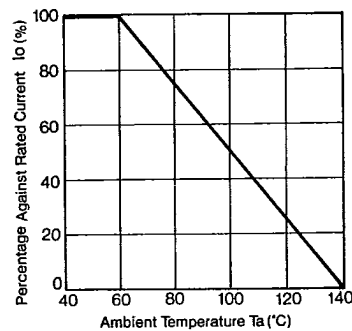


CTU-1 Series

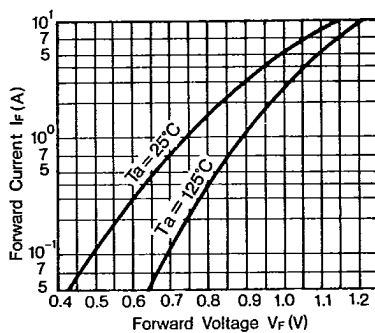
Io - Fin Characteristics



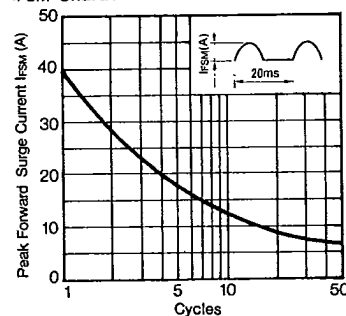
Io - Ta Deratings

CTU-2
Series

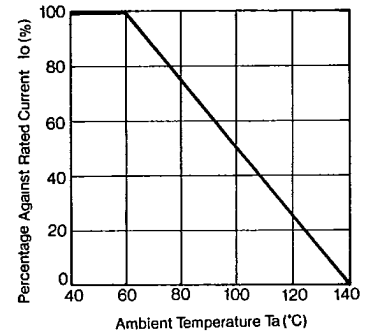
IF - VF Characteristics



IFSM Characteristics

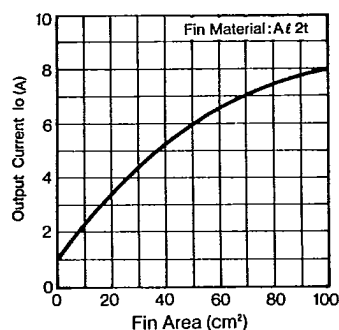


Io - Ta Deratings

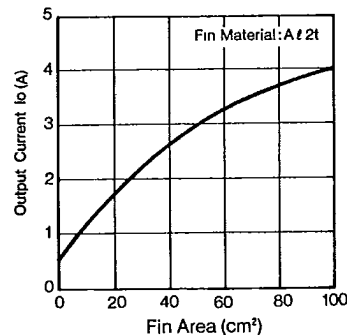


CTU-22U

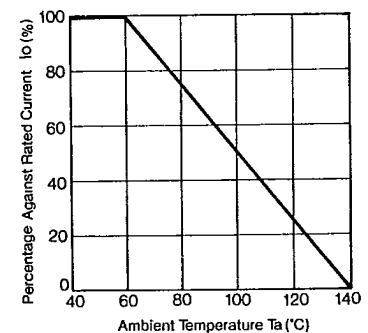
Io - Fin Characteristics



Io - Fin Characteristics



Io - Ta Deratings



Taping Specifications

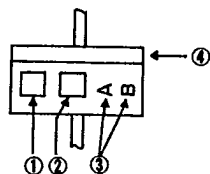
T-91-20

Designation	Dimension (in mm)	Packaging Dimension and Marking	Quantity
V Add Suffix [V] to type No.	Axial Taping 	Reel 	5,000 pcs per reel (2.7 ϕ body) 3,000 pcs per reel (3.0 ϕ body)
V1 Add Suffix [V1] to Type No.	Axial Taping 	Ammunition Pack 	2,000 pcs per box (2.7 ϕ body) 1,000 pcs per box (4.0 ϕ body)
VO Add Suffix [VO] to Type No.	Axial Taping 	Ammunition Pack 	2'000 pcs per box (2.7 ϕ body) (2.4 ϕ body)
W Add Suffix [W] to Type No.	Radial Taping 	Ammunition Pack 	4,000 pcs per box (2.7 ϕ body) (0.6 ϕ lead)
WS Add Suffix [WS] to Type No.	Radial Taping (Applicable to AO Series) 	Ammunition Pack 	2,500 pcs per box (2.4 ϕ body)
WK Add Suffix [WK] to Type No.	Radial Taping (Applicable to AO Series) 	Ammunition Pack 	2,500 pcs per box (2.4 ϕ body)

Marking Guide

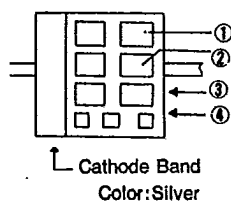
T-91-20

1 Small TMD



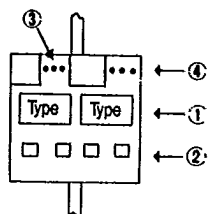
- ① Type Designation (in abbreviation)
AM01 is abbreviated as M.
- ② Class Designation
Z: 200V, No Letter: 400V, A: 600V
- ③ A: Year (Last Number of AD Year)
B: Month (Jan. to Sept. are represented by numbers 1 to 9 respectively, and Oct., Nov., and Dec. are abbreviated as O, N and D respectively)
- ④ Cathode Band: Successive Band, however AU02 Type is Non-Successive Band.

2 E/EO TMD



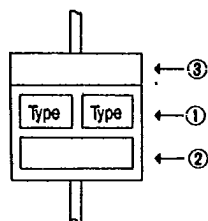
- ① Type Designation (in abbreviation)
EM01 is abbreviated as MO, EM2 is abbreviated as M2.
- ② Class Designation
Z: 200V, No Letter: 400V, A: 600V
B: 800V, C: 1000V, F: 1500V
However, EU02A to be marked 2A, and EU2YX to be marked Y.
- ③ Abbreviations Representing Production Period
A: Year (Last Number of AD Year)
B: Month (1~9, O, N, D)
- ④ Production Period Divided in 3 ten day terms
• : 1st 10days •• : 2nd 10days ••• : 3rd 10days

3 R TMD



- ① Type Designation: Mark in 2 sets
- ② Production Period: Mark in 4 sets
A: Year (Last Number of AD Year)
B: Month (1~9, O, N, D)
- ③ Production Period Divided in 3 ten day terms
• : 1st 10days •• : 2nd 10days ••• : 3rd 10days
- ④ Cathode Band Color: Silver: For Power Supply
Yellow: For Middle Speed
Red : For High Speed and Ultra-High Speed

4 Large TMD



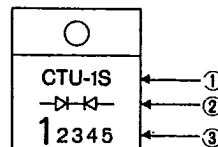
- ① Type Designation: Mark in 2 sets
- ② Production Period and Term: Mark in 2 sets
A: Year (Last Number of AD Year)
B: Month (1~9, O, N, D)
• : 1st 10days •• : 2nd 10days ••• : 3rd 10days
- ③ Cathode Band Color: Silver: For Rectifier
Yellow : For Middle Fast Recovery
Red : For Fast & Ultra- Fast Recovery

5 GMD

Type Designation	Color Dot
GM-1	Black
GH-1	Orange
GU-1	Green
GM-3	None
GH-3	Orange
GU-3	Green
GH-3S	Orange
GU-3S	Green

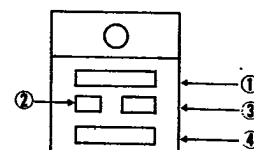
Class	V _{RM}	Cathode Band
Y	100	Brown
Z	200	Black
	400	Blue
A	600	Red
B	800	Green
C	1000	Yellow (2 Cathode Bands for GU-3 Only)
E	1300	Black
F	1500	Red

6 TO220 Type (FM or CT Type)



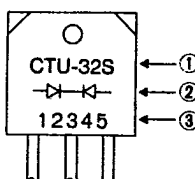
- ① Type Designation
Show FMU-12S as FMU12S.
- ② Polarity: Rectifier Symbols
- ③ Lot Number:
Laser Marking

7 TO220 Type (FM or CT Type, single chip)



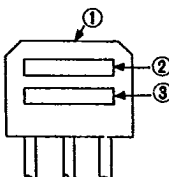
- ① Type Designation: Omit Last Letter
Show FML-G12S as FMLG12.
- ② Last Letter of Type Designation
- ③ Polarity: Rectifier Symbols
- ④ Lot Number:
Laser Marking

8 TO3P Type (FM or CT Type)



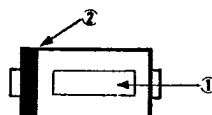
- ① Type shown in full designation
However, CTB-34/34S/34M are marked as CTB-34, CTU-G3DR is marked as CTUG3DR.
- ② Polarity: Rectifier Symbols
- ③ Lot Number:
1) M, U, G and L Types
First Number : Last Digit of AD Year
Second Number : Month
Third and Fourth Numbers: Day
Fifth Number : None
2) For types CTB-34/34S/34M, the fifth letter shows type designation. If no fifth number, the type is CTB-33 or CTB-34.
3) Marking Color: Silver

9 MI-10/15 Type



- ① MI-10/15 is die-stamped on the top of the case.
- ② Rectifier Symbols
- ③ Lot Number:
First Number : Peak Reverse Voltage:
(Letter) 0=50V, 1=100V, 2=200V,
4=400V, 6=600V, C=1000V
Second Number : Last Digit of AD Year
Third Number : Month
Fourth and Fifth Numbers: Day
Sixth Number : Production number and
U: Voltage Doubler Type

10 SFP Type



- ① Type Designation:
SFPB-64 is abbreviated as B64.
- ② Cathode Band