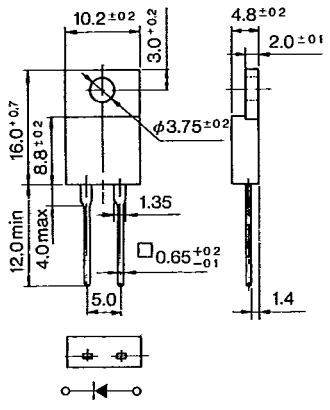
Fast Recovery Diodes ■V_{RM}:100~1300V ■Io:4.0~20A

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

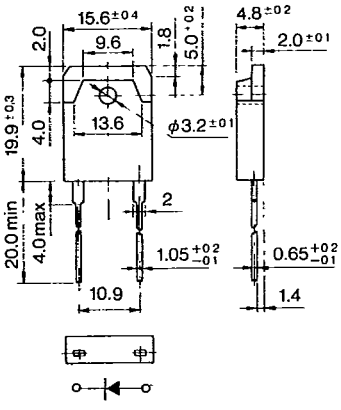
CTU/FMU

Rating/Characteristics / Type No.	Absolute Maximum Ratings V_{RSM} (V)	V_{RM} (V)	Io (A) With Fin	I_{FSM} (A) 50Hz Half Sine Wave Single Pulse	Tj (°C)	Tstg (°C)	Electrical Characteristics (Ta=25°C) V_F (V) Max. per chip	I_F (A)	I_R (μA) $V_R=V_{RM}$ max (per chip)	$I_{R(H)}$ (μA) $V_R=V_{RM}$, Ta=100°C max (per chip)	trr (μs)	I_F/I_{RP} (mA)	Others: Outline Drawing	Weight (g)	Taping	Internal Connections
CTU-G2DR	1350	1300	4.0	40	−40~+140		2.0	4.0	100				㊸	2.6		
CTU-G3DR	1350	1300	6.0	60				6.0					㊹	6.1		
FMU-11S, R	150	100	5.0	30				2.5					㊺	2.1		(Center Tap) S Type
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					㊻	5.5		
FMU-32S, R	250	200														
FMU-34S, R	450	400														
FMU-36S, R	650	600														
CTU-11S	150	100	6.0	30				3.0	50	500	0.4				—	R Type
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	−40~+140		2.0	5.0				10/10	⑱	2.6		Voltage Doubler Type
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													

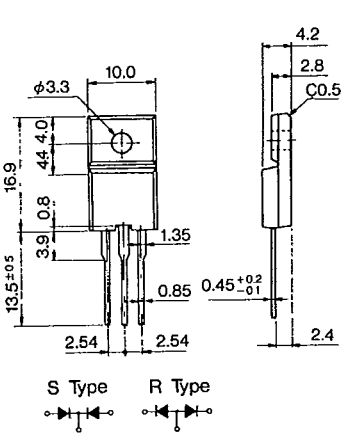
Outline Drawing ㊸



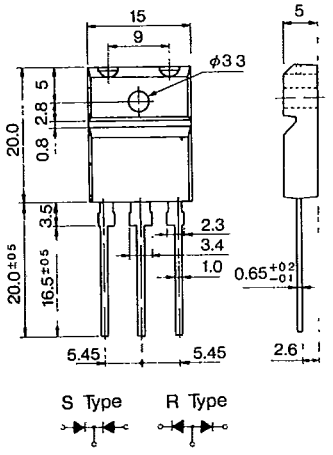
Outline Drawing ㊹



Outline Drawing ㊺



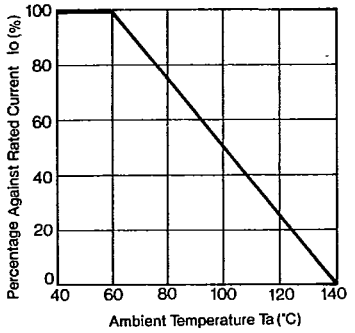
Outline Drawing ㊻



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

CTU-G2R
CTU-G3R

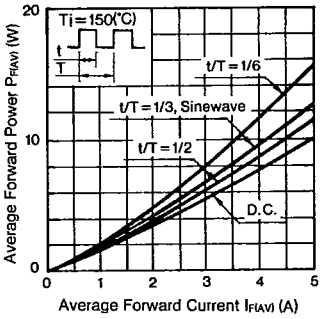
Io–Ta Deratings



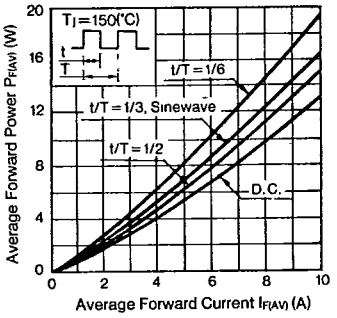
FMU Series

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

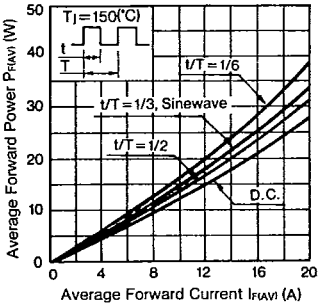
FMU-1



FMU-2

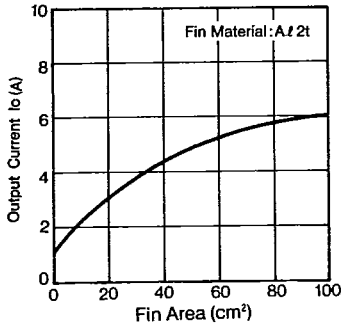


FMU-3

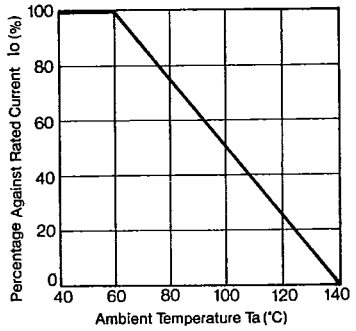


CTU-1 Series

Io –Fin Characteristics

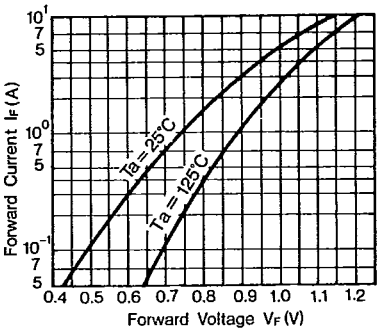


Io–Ta Deratings

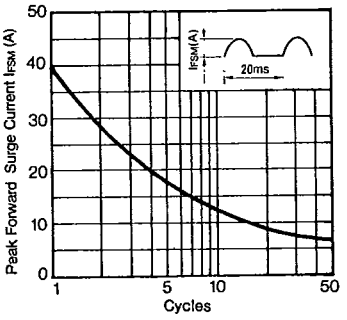


CTU-2 Series

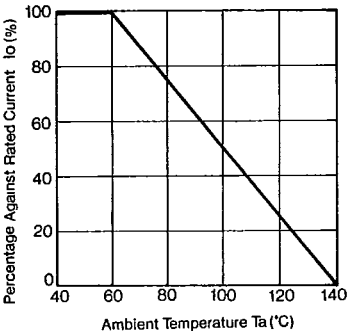
I_F–V_F Characteristics



I_{FSM} Characteristics

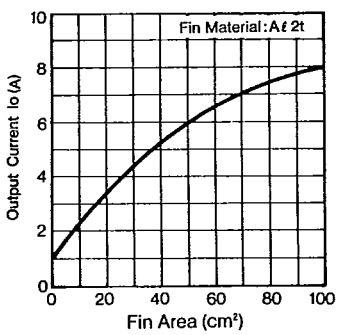


Io–Ta Deratings

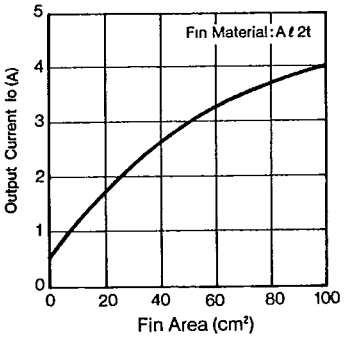


CTU-22U

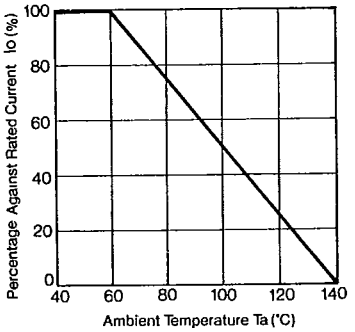
Io –Fin Characteristics



Io –Fin Characteristics

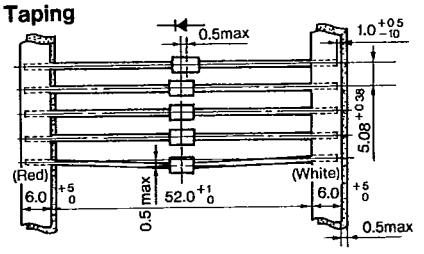
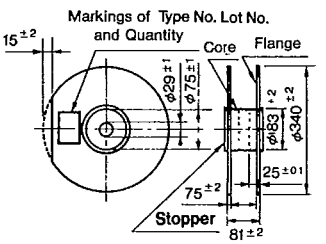
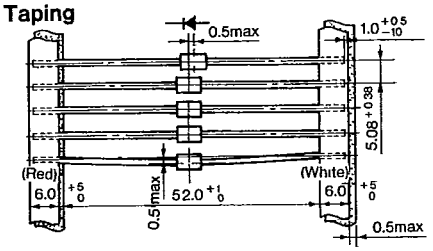
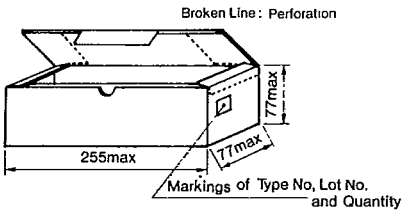
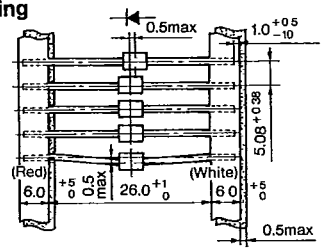
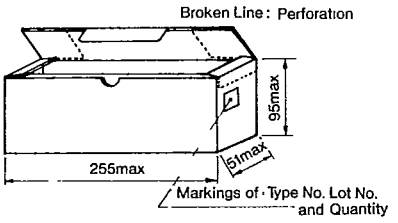
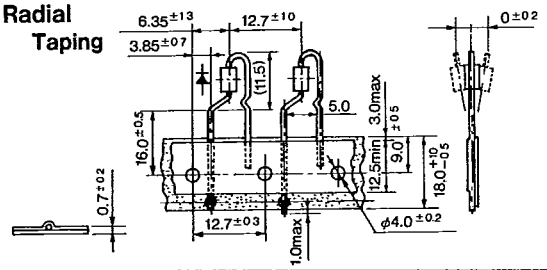
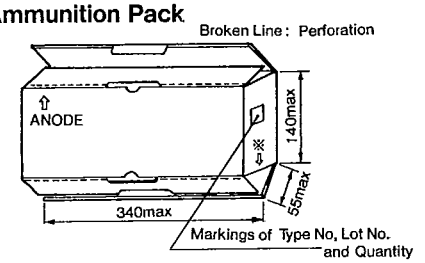
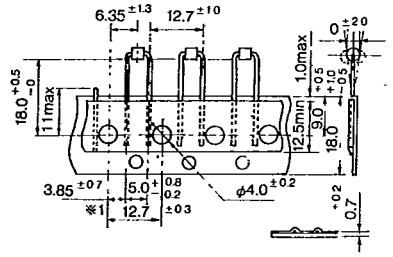
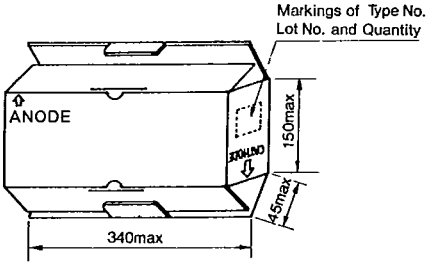
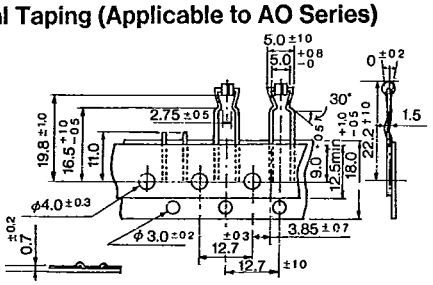


Io–Ta Deratings



Taping Specifications

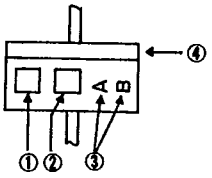
T-91-20

Designation	Dimension (in mm)	Packaging Dimension and Marking	Quantity
V Add Suffix [V] to type No.	**Axial Taping** 	**Reel** 	5,000 pcs per reel (2.7φ body) 3,000 pcs per reel (3.0φ body)
V1 Add Suffix [V1] to Type No.	**Axial Taping** 	**Ammunition Pack** 	2,000 pcs per box (2.7φ body) 1,000 pcs per box (4.0φ body)
VO Add Suffix [VO] to Type No.	**Axial Taping** 	**Ammunition Pack** 	2'000 pcs per box (2.7φ body) (2.4φ body)
W Add Suffix [W] to Type No.	**Radial Taping** 	**Ammunition Pack** 	4,000 pcs per box (2.7φ body) (0.6φ lead)
WS Add Suffix [WS] to Type No.	**Radial Taping (Applicable to AO Series)** 	**Ammunition Pack** 	2.500 pcs per box (2.4φ body)
WK Add Suffix [WK] to Type No.	**Radial Taping (Applicable to AO Series)** 		2.500 pcs per box (2.4φ body)

Marking Guide

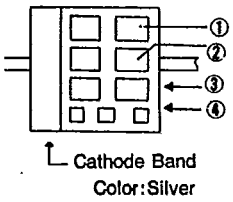
T-91-20

1 Small TMD



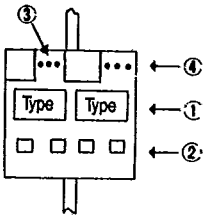
①Type Designation (in abbreviation)
AM01 is abbreviated as M.
②Class Designation
Z:200V, No Letter: 400V, A: 600V
③A:Year (Last Number of AD Year)
B:Month (Jan. to Sept. are represented by numbers 1 to 9 respectively, and Oct., Nov., and Dec. are abbreviated as O, N and D respectively)
④Cathode Band: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

2 E/EO TMD



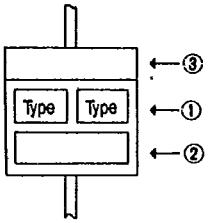
①Type Designation (in abbreviation)
EM01 is abbreviated as MO, EM2 is abbreviated as M2.
②Class Designation
Z:200V, No Letter:400V, A:600V
B:800 V, C:1000V, F:1500V
However, EU02A to be marked 2A, and EU2YX to be marked Y.
③Abbreviations Representing Production Period
A:Year (Last Number of AD Year)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

3 R TMD



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

4 Large TMD



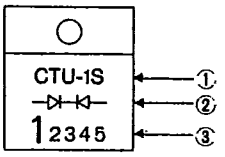
①Type Designation: Mark in 2 sets
②Production Period and Term: Mark in 2 sets
A:Year (Last Number of AD Year)
B:Month (1~9, O, N, D)
• : 1st 10days •• : 2nd 10days ••• : 3rd 10days
③Cathode Band Color: Silver: For Rectifier
Yellow: For Middle Fast Recovery
Red : For Fast & Ultra-Fast Recovovery

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

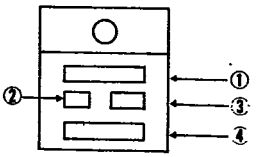
Class	V_{RM}	Cathode Band
Y	100	Brown
Z	200	Black
	400	Blue
A	600	Red
B	800	Green
C	1000	Yellow (2 Cathode Bands for GU-3 Only)
E	1300	Black
F	1500	Red

6 TO220 Type (FM or CT Type)



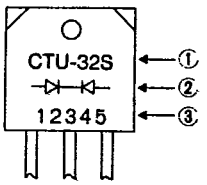
①Type Designation
Show FMU-12S as FMU12S.
②Polarity: Rectifier Symbols
③Lot Number:
Laser Marking

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



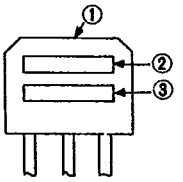
①Type Designation: Omit Last Letter
Show FML-G12S as FMLG12.
②Last Letter of Type Designation
③Polarity: Recitifier Symbols
④Lot Number:
Laser Marking

8 TO3P Type (FM or CT Type)



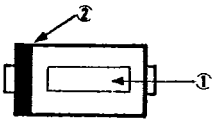
①Type shown in full designation
However, CTB-34/34S/34M are marked as CTB-34, CTU-G3DR is marked as CTUG3DR.
②Polarity: Rectifier Symbols
③Lot Number:
1) M, U, G and L Types
First Number : Last Digit of AD Year
Second Number : Month
Third and Fourth Numbers: Day
Fifth Number : None
2) For types CTB-34/34S/34M, 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



①MI-10/15 is die-stamped on the top of the case.
②Rectifier Symbols
③Lot Number:
First Number (Letter) : Peak Reverse Voltage:
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



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