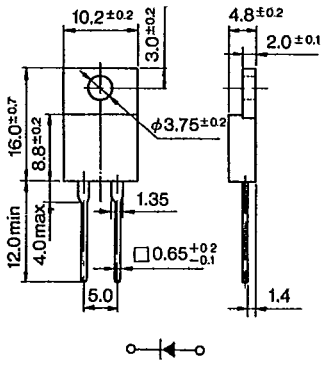
Fast Recovery Diodes ■ V_{RM}: 100~1300V ■ Io: 4.0~20A

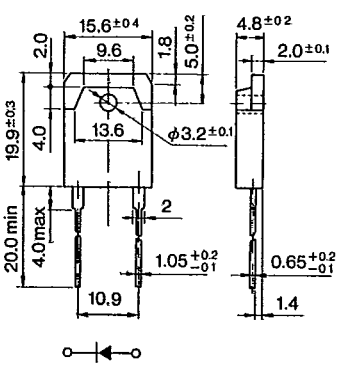
CTU/FMU

Rating/ Characteristics / Type No.	Absolute Maximum Ratings						Electrical Characteristics (Ta=25°C)					Others			
	V_{RSM} (V)	V_{RM} (V)	Io (A)	I_{FSM} (A)	Tj (°C)	Tstg (°C)	V_F (V)		I_R (μA)	$I_{R(H)}$ (μA)	trr (μs)	Outline Drawing	Weight(g)	Taping	Internal Connections
			With Fin	50Hz Half Sine Wave Single Pulse			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)				
CTU-G2DR	1350	1300	4.0	40	−40~+140		2.0	4.0	100		100/100	㊺	2.6		
CTU-G3DR	1350	1300	6.0	60				6.0				㊻	6.1		
FMU-12S, R	250	200	5.0	30	−40~+150		1.5	2.5	50	500	0.4				
FMU-14S, R	450	400													
FMU-16S, R	650	600													
FMU-21S, R	150	100	10	40				5.0				㊼	2.1		S Type
FMU-22S, R	250	200													
FMU-24S, R	450	400													
FMU-26S, R	650	600													
FMU-32S, R	250	200	20	80				10				㊽	5.5		
FMU-34S, R	450	400													
FMU-36S, R	650	600													
CTU-12S, R	250	200	6.0	30	−40~+140		2.0	3.0			10/10	㊾	2.6		R Type
CTU-14S, R	450	400													
CTU-16S, R	650	600													
CTU-21S, R	150	100	8.0	40				5.0							
CTU-22S, R	250	200													
CTU-24S, R	450	400													
CTU-26S, R	650	600													

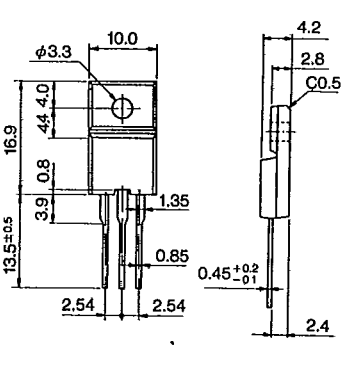
Outline Drawing ㊺



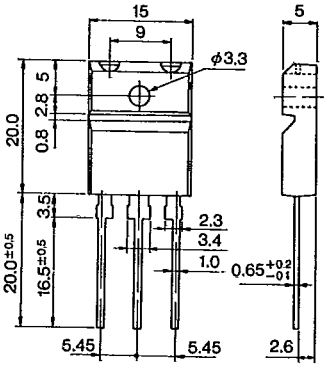
Outline Drawing ㊻



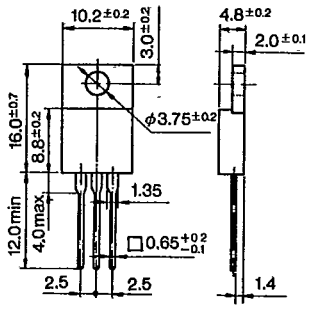
Outline Drawing ㊼



Outline Drawing ㊽



Outline Drawing ㊾

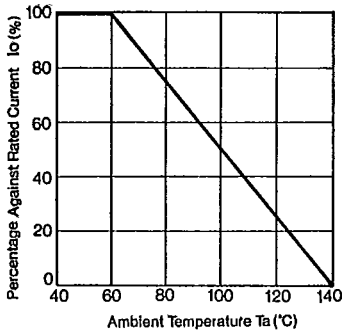


㊺~㊾ Plastic Molded Flammability : UL94V-0 or Equivalent

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CTU-G2R
CTU-G3R

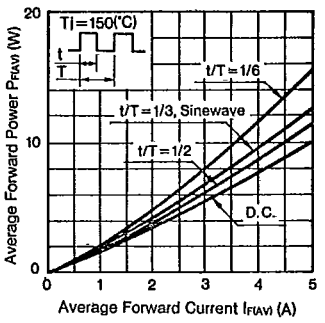
Io–Ta Deratings



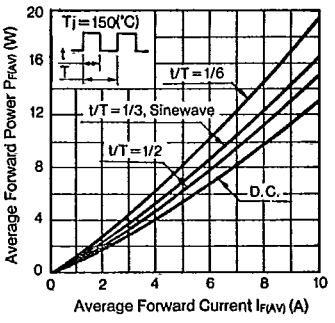
FMU Series

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

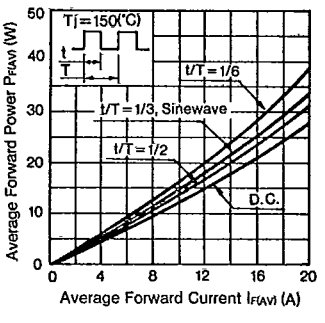
FMU-1



FMU-2

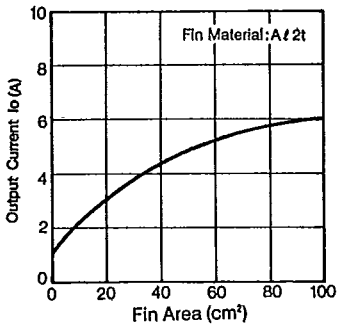


FMU-3

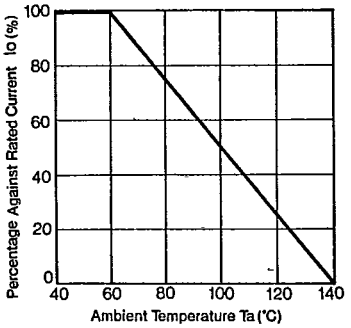


CTU-1 Series

Io –Fin Characteristics

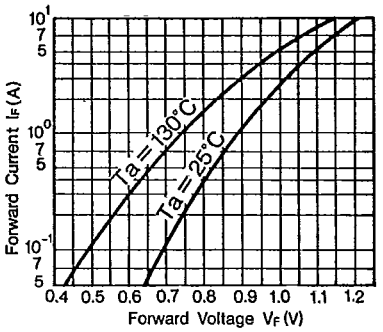


Io–Ta Deratings

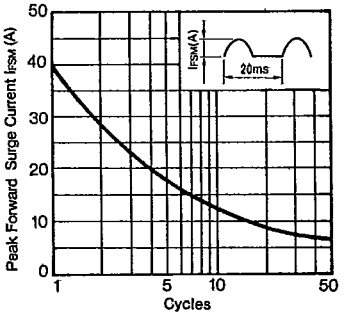


CTU-2 Series

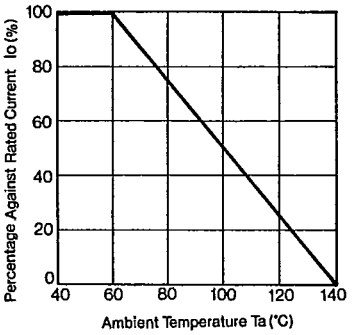
I_F–V_F Characteristics



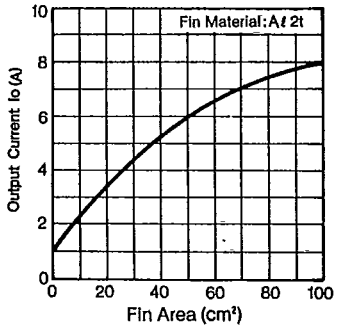
I_{FSM} Characteristics



Io–Ta Deratings

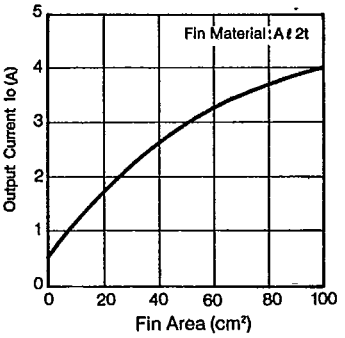


Io –Fin Characteristics

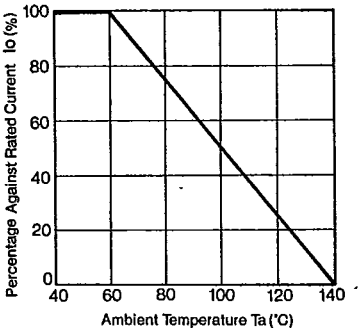


CTU-22U

Io –Fin Characteristics



Io–Ta Deratings



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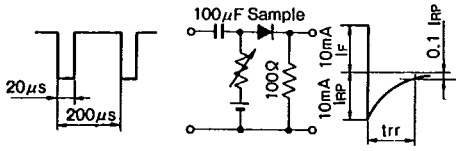
Symbols/trr Measurement Circuit

Symbols

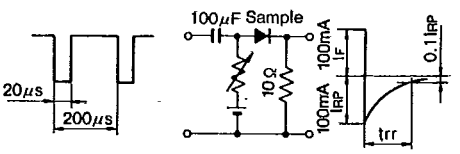
V_{RSM}	Peak Reverse Surge Voltage	I_{RSM}	Peak Reverse Surge Current	Tstg	Storage Temperature
V_{RM}	Peak Reverse Voltage	I_R	Reverse Current	trr	Reverse Recovery Time
V_{P-P}	Reverse Voltage (Peak to Peak)	I_{RP}	Peak Reverse Current	Ct	Total Capacitance Between Terminals
V_R	Reverse Voltage	$I_{R(H)}$	Reverse Current (High Temperature)	Rth(j-c)	Thermal Resistance, Junction to Case
V_F	Forward Voltage	Iz	Avalanche Current	rz	Temperature Coefficient of Breakdown Voltage
V_B	Breakdown Voltage	I_{ZSM}	Allowable Avalanche Current	Rz	Equivalent Resistance of Breakdown Region
I_O	Average Rectified Forward Current	Ta	Ambient Temperature	$P_{F(AV)}$	Average Forward Power Dissipation
I_F	Forward Current	Tj	Junction Temperature	I^2t	I^2t limiting Value
$I_{F(AV)}$	Average Forward Current	Topr	Operating Ambient Temperature		
I_{FSM}	Peak Forward Surge Current	Tc	Case Temperature		

Reverse Recovery Time Measurement Circuit

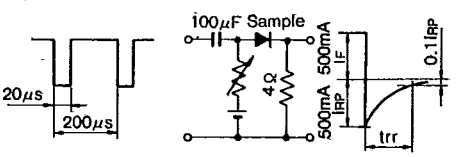
① $I_F = I_{RP} = 10mA$ to $1mA$



② $I_F = I_{RP} = 100mA$ to $10mA$

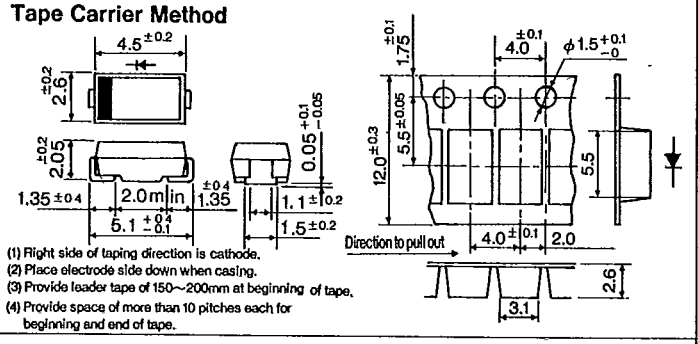
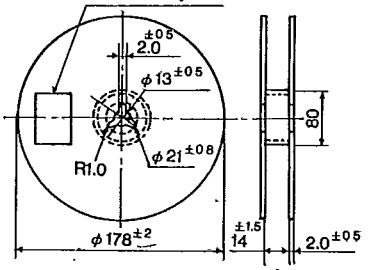
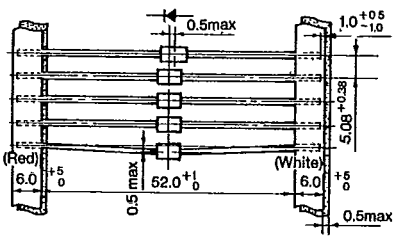
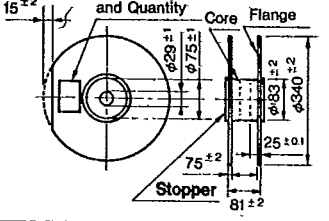


③ $I_F = I_{RP} = 500mA$ to $50mA$



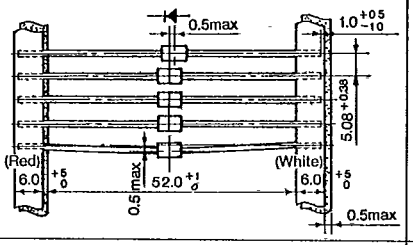
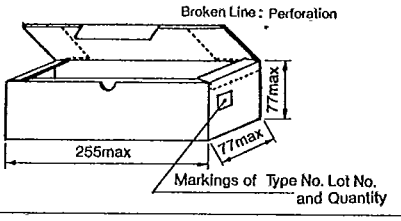
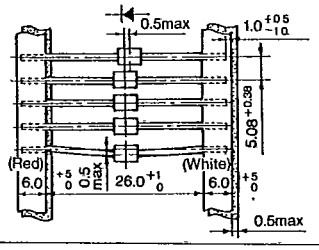
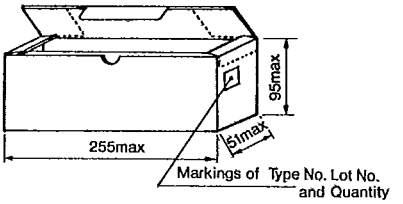
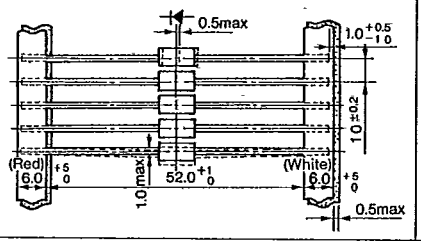
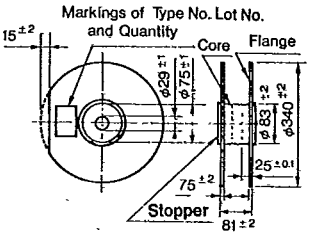
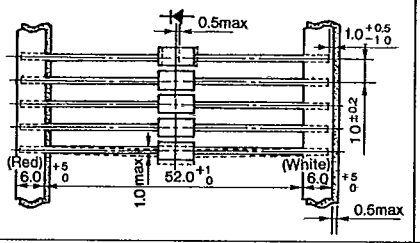
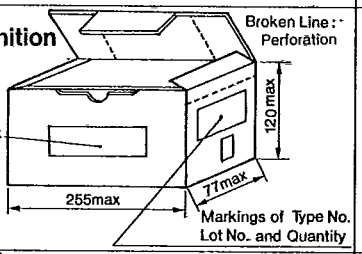
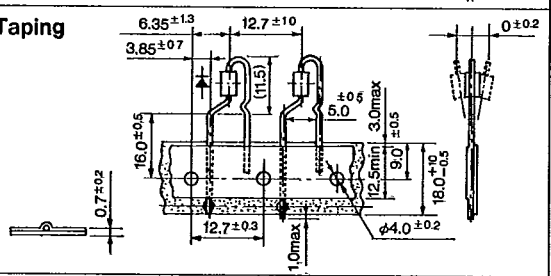
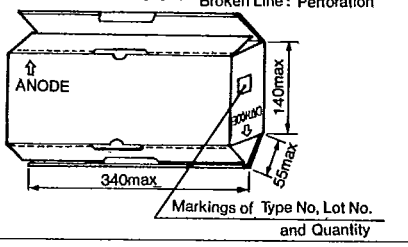
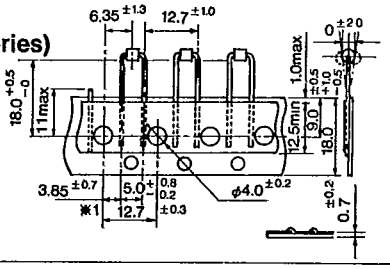
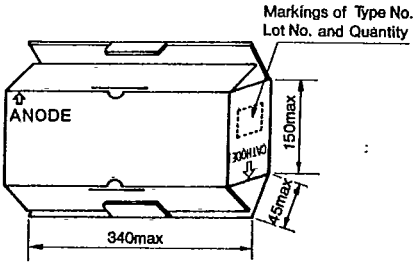
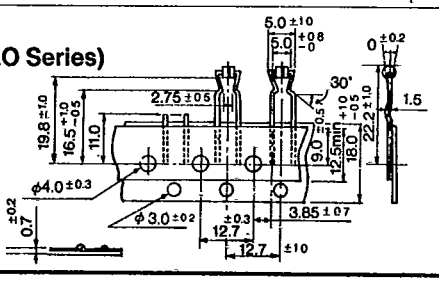
Taping Specifications

Excluding High Voltage Diodes

Designation	Dimension (in mm)	Packaging Dimension and Marking	Quantity
V Add Suffix [V] to Type No.	**Tape Carrier Method**  (1) Right side of taping direction is cathode. (2) Place electrode side down when casing. (3) Provide leader tape of 150~200mm at beginning of tape. (4) Provide space of more than 10 pitches each for beginning and end of tape.	**Reel** Marking of Type No., Lot No. and Quantity 	1,800 pcs per reel
V Add Suffix [V] to type No.	**Axial Taping** 	**Reel** Markings of Type No. Lot No. and Quantity 	5,000 pcs per reel (2.7φ body) 3,000 pcs per reel (4.0φ body)

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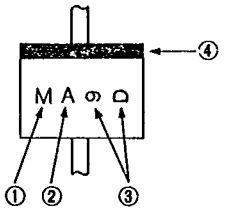
Taping Specifications

Designation	Dimension (in mm)	Packaging Dimension and Marking	Quantity
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)
V3 Add Suffix [V3] to Type No.	Axial Taping 	Reel 	1,500 pcs per reel (5.2φ body)
V4 Add Suffix [V4] to Type No.	Axial Taping 	Ammunition Pack 	1,000 pcs per box (5.2φ 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) 		

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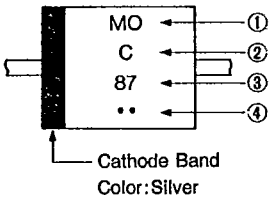
Marking Guide

1 Small TMD



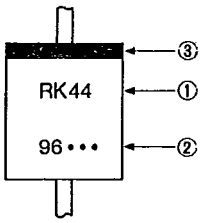
①Type Designation (in abbreviation)
AM01 is abbreviated as M.
②Class Designation
Z:200V, No Letter:400V, A:600V
③A:Year (Last Number of AD Year)
B:Month (Jan. to Sept. are represented by numbers 1 to 9 respectively, and Oct., Nov., and Dec. are abbreviated as O, N and D respectively)
④Cathode Band:Successive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

2 E/EO Type 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, 0, N, D)
④Production Period Divided in 3 ten day terms
• : 1st 10days •• : 2nd 10days ••• : 3rd 10days

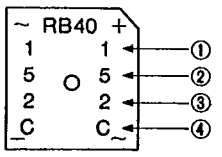
3 R Type TMD



①Type Designation:Mark in 2 sets
②Production Period:Mark in 4 sets
A:Year (Last Number of AD Year)
B:Month (1~9, 0, 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

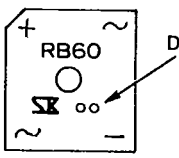
4 RB40/60

(RB40 Series)



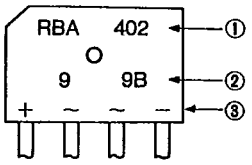
①Peak Reverse Voltage Designation
1, 2, 4, 6, C
Production Period
②Year (Last Number of AD Year)
③Month (1~9, 0, N, D)
④Divided in 3 ten day terms
A:1st 10days, B:2nd 10days
C:3rd 10days
Color Designation: Silver

(RB60 Series)



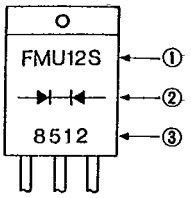
Dot Designation RB601 Violet
RB602 No Color
RB604 Blue
RB606 White

5 RBV/RBA



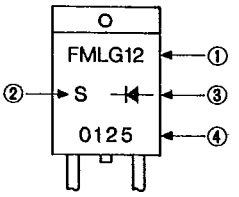
①Type Designation
②Lot Number
1st : Year (Last Number of AD Year)
2nd: Month (1~9, 0, N, D)
3rd : Divided 1~3 ten day Terms
A:1st 10 days B:2nd 10 days
C:3rd 10 days
③In-Put Designation

6 TO220 Type (FM or CT Type)



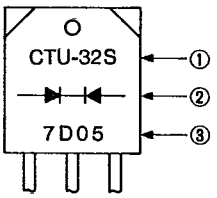
①Type Designation
Show FMU-12S as FMU12S.
②Polarity:Rectifier Symbols
③Lot Number (Laser Marking)
1st : Year (Last Number of AD Year)
2nd : Month (0~9, 0, N, D)
3rd, 4th: Day

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



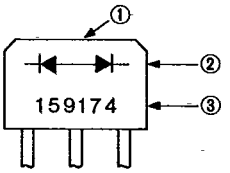
①Type Designation:Omit Last Letter
Show FML-G12S as FMLG12.
②Last Letter of Type Designation
③Polarity:Recitifier Symbols
④Lot Number (Laser Marking)
1st : Year (Last Number of AD Year)
2nd : Month (0~9, 0, N, D)
3rd, 4th: Day

8 TO3P Type (FM or CT Type)



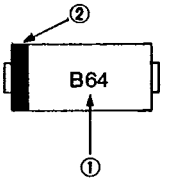
①Type shown in full designation
However, CTB-34/34S/34M are marked as CTB-34, CTU-G3DR is marked as CTUG3DR.
②Polarity:Rectifier Symbols
③Lot Number:
1) M, U, G and L Types
First Number : Last Digit of AD Year
Second Number : Month
Third and Fourth Numbers:Day
Fifth Number : None
2) For types CTB-34/34S/34M,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

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