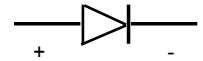
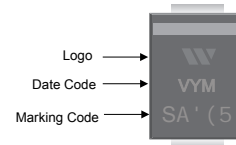


PRIMARY CHARACTERISTICS	
V_{RRM}	40V,60V,100V,150V,200V
I_O	3.0A
V_F	0.45V,0.55V,0.75V,0.82V,0.85V
$T_{J,Max}$	150°C,175°C

SMA(DO-214AC) PACKAGE

- Body Marking Example
Marking :GA' (5rGA' &&5
Ex :SM' (5



V:Product Lines
Y:A.D. late code, EX : 4-2014,5-2015
M:Month, EX : 1-1,2-2,---10-0,11-N,12-D

FEATURES

- Low Profile surface mount applications in order to optimize board space
- 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
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SMA(DO-214AC)
- Polarity : Indicated by cathode band
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics

Ratings at $T_a=25^\circ\text{C}$ unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive loaded.
For capacitive load, derate current by 20% .

Parameter	Symbol	SM34A	SM36A	SM310A	SM315A	SM320A	Units
Marking Code		SM34A	SM36A	SM310A	SM315A	SM320A	
Max. Repetitive peak reverse voltage	V_{RRM}	40	60	100	150	200	V
Max. DC blocking voltage	V_{DC}	40	60	100	150	200	V
Max. RMS voltage	V_{RMS}	28	42	70	105	140	V
Max. Instantaneous forward voltage @3.0A, $T_A=25^\circ\text{C}$	V_F	0.45	0.55	0.75	0.82	0.85	V
Operating Temperature	T_J	-50 to +150			-50 to +175		$^\circ\text{C}$

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Units
Forward rectified current	see Fig.1	I_O			3.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			125	A
Reverse Current	$V_R = V_{RRM}$ $T_A=25^\circ\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A=100^\circ\text{C}$	I_R			20	mA
Thermal Resistance	Junction to ambient	$R_{\theta JA}$		55		$^\circ\text{C/W}$
Diode Junction capacitance	$f=1\text{MHz}$ and applied 4V DC reverse Voltage	C_J		250		pF
Storage temperature		T_{STG}	-50		+175	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES (SM34A~SM320A)

Fig.1 - Typical Forward Current Derating Curve

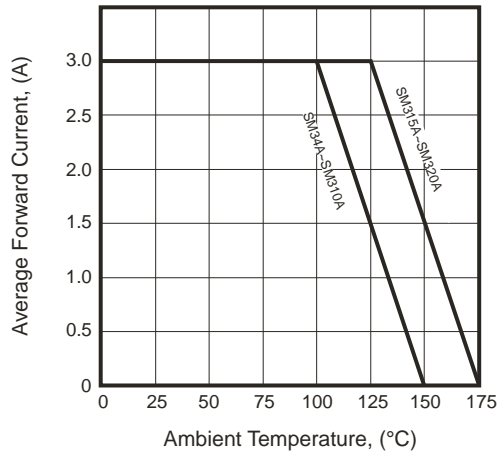


Fig.2 - Typical Forward Characteristics

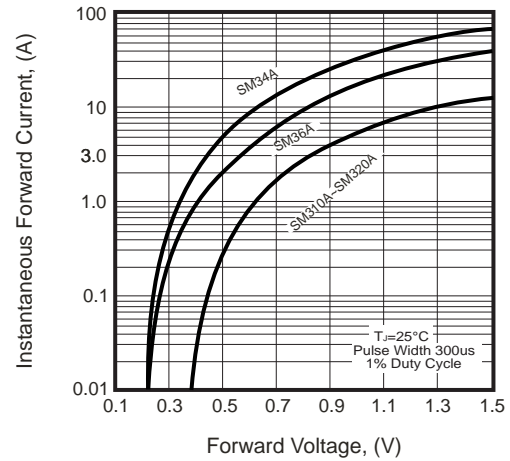


Fig.3 - Maximum Non-repetitive Forward Surge Current

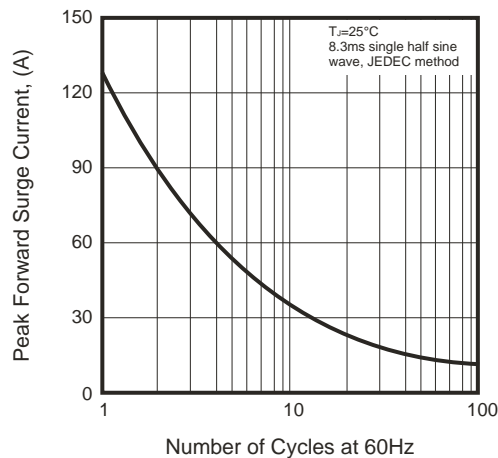


Fig.4 - Typical Junction Capacitance

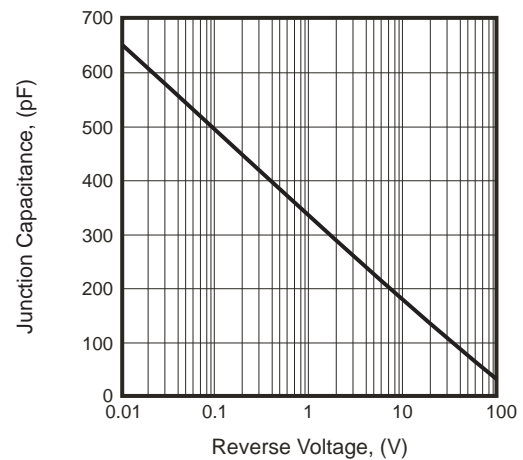
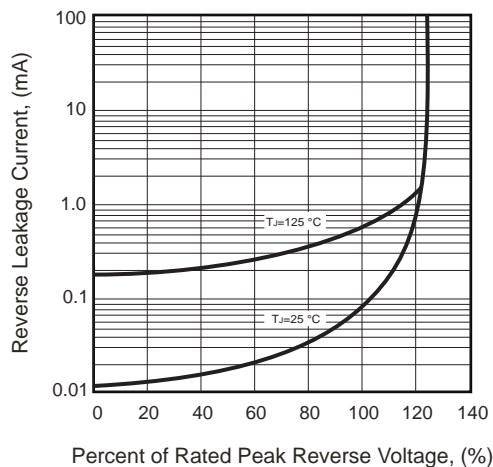
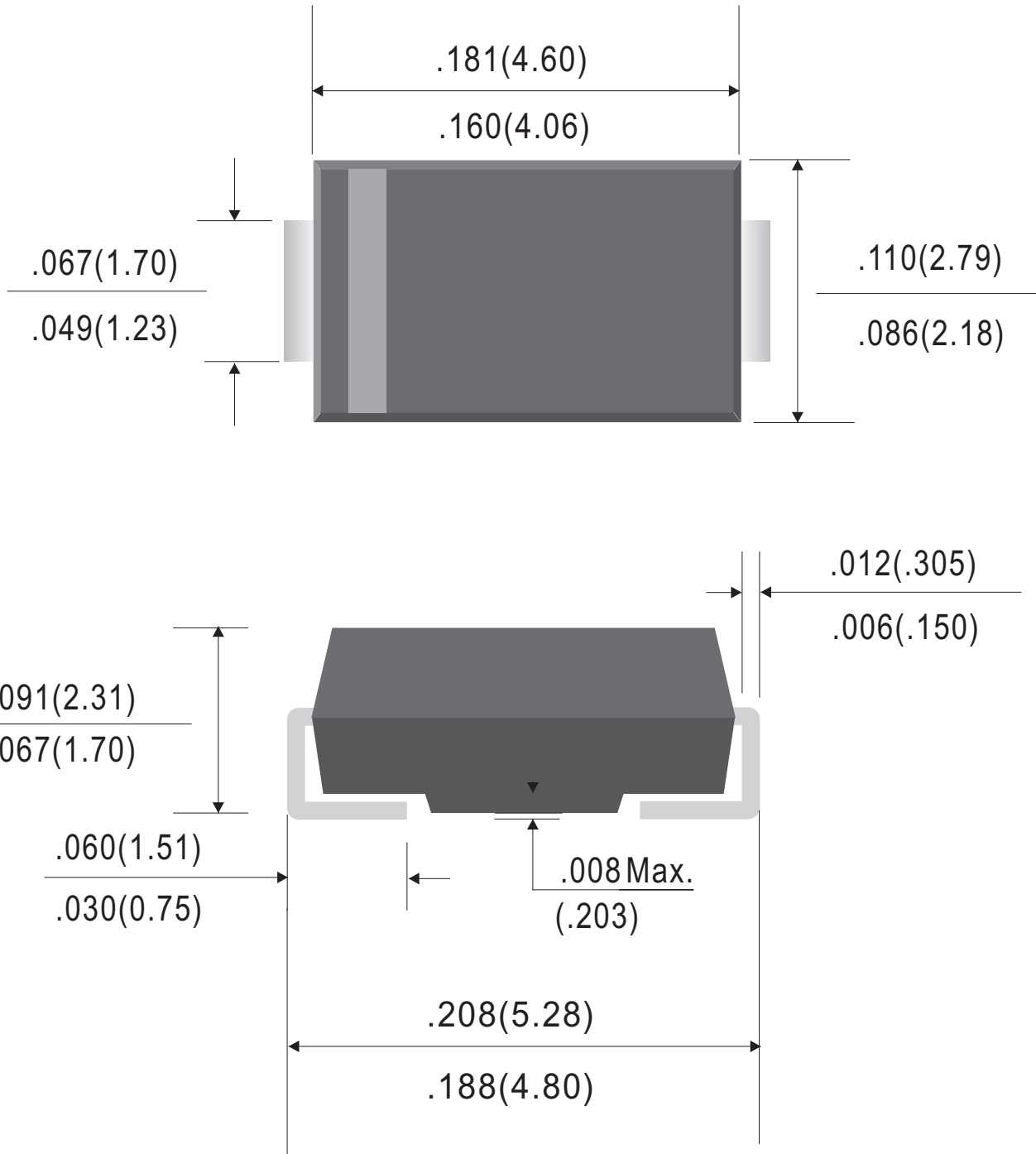


Fig.5 - Typical Reverse Characteristics



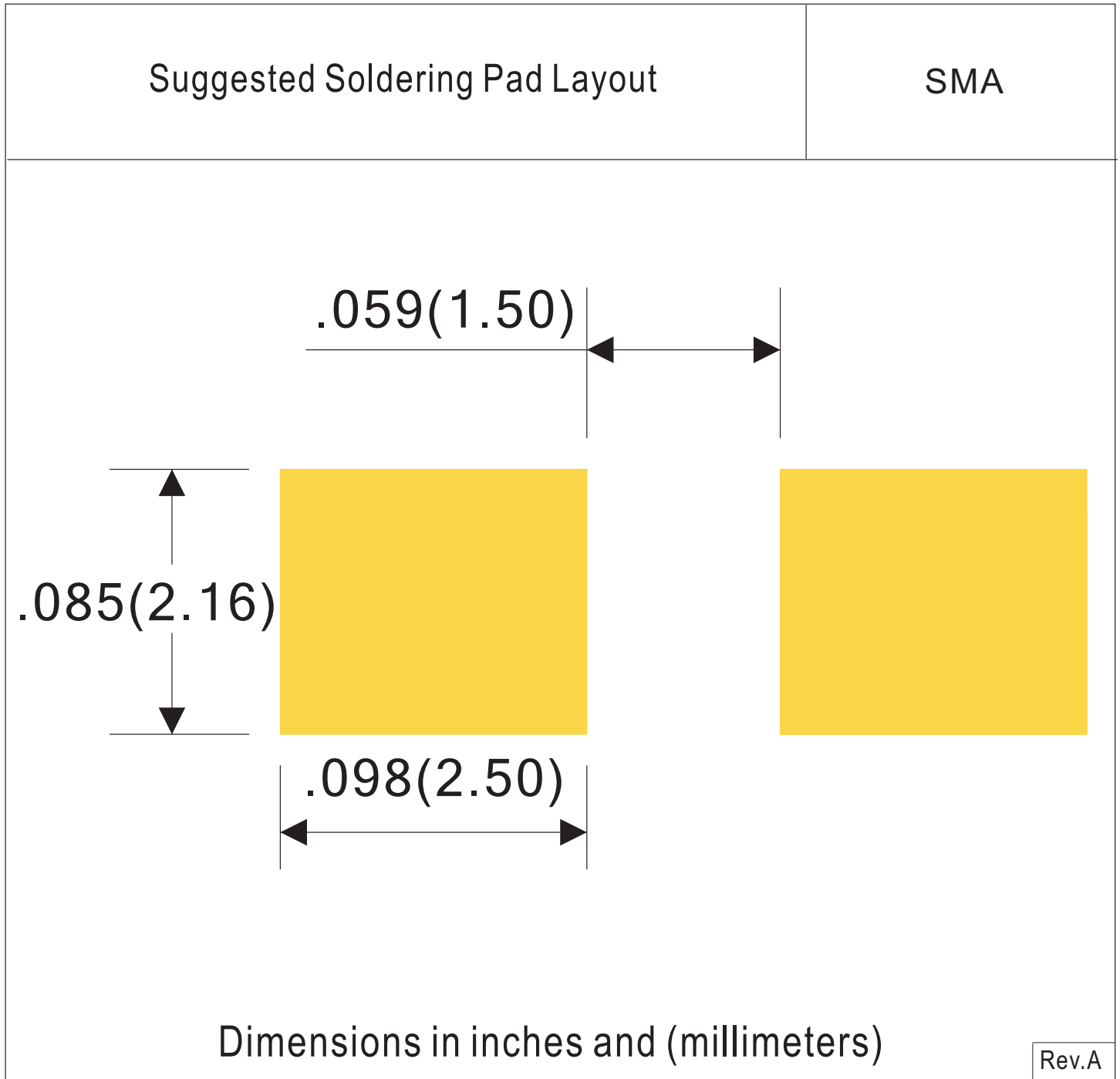
Outline Drawing

SMA(DO-214AC)



Dimensions in inches and (millimeters)

Rev.C

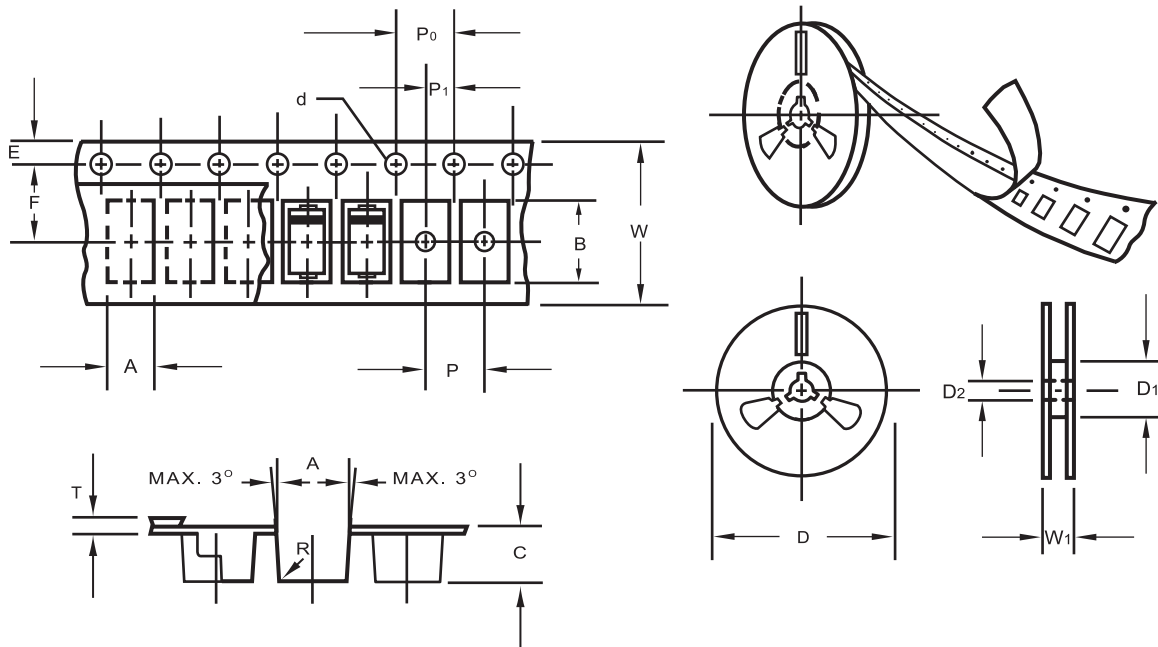


Reel Taping Sepecification - Surface Mount Device

Reel Packing

PACKAGE	PER REEL EA	REEL DIA (m/m)	BOX SIZE (m/m)	PER BOX EA	CARTION (m/m)	PER CARTION EA	GROSS WEIGHT (Kg)
SMA	5,000	330	340*340*40	10,000	355*360*350	80,000	15.0
SMB	3,000	330	340*340*40	6,000	355*360*350	48,000	13.6
SMC	3,000	330	340*340*40	6,000	355*360*350	48,000	18.5

Note. Packing tape color : It's contains colorless & Black.



ITEM	SYMBOL	DO214AC (SMA) mm(inch)	DO214AA (SMB) mm(inch)	DO214AB (SMC) mm(inch)
Carrier width	A	3.0 ± 0.1 (.122 ± .004)	3.65 ± 0.1 (.148 ± .004)	6.0 ± 0.1 (.240 ± .004)
Carrier length	B	5.4 ± 0.1 (.213 ± .004)	5.69 ± 0.1 (.224 ± .004)	8.30 ± 0.1 (.330 ± .004)
Carrier depth	C	2.4 ± 0.1 (.098 ± .004)	2.67 ± 0.1 (.105 ± .004)	2.5 ± 0.1 (.100 ± .004)
Sprocket hole	d	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)
Reel outside diameter	D	178 ± 2.0 (7.0 ± 0.79)	178 ± 2.0 (7.0 ± 0.79)	178 ± 2.0 (7.0 ± 0.79)
Reel inner diameter	D1	8.0 ± 0.2 (3.15 ± .008)	8.0 ± 0.2 (3.15 ± .008)	8.0 ± 0.2 (3.15 ± .008)
Feed hole diameter	D2	13 ± 0.5 (.152 ± .020)	13 ± 0.5 (.152 ± .020)	13 ± 0.5 (.152 ± .020)
Stroctet hole position	E	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)	1.5 ± 0.1 (.059 ± .004)
Punch hole position	F	5.65 ± 0.05 (.222 ± .002)	5.65 ± 0.05 (.222 ± .002)	7.65 ± 0.05 (.301 ± .002)
Punch hole pitch	P	4.0 ± 0.1 (.157 ± .004)	8.0 ± 0.1 (.315 ± .004)	8.0 ± 0.1 (.315 ± .004)
Sprocket hole pitch	P0	4.0 ± 0.1 (.157 ± .004)	4.0 ± 0.1 (.157 ± .004)	4.0 ± 0.1 (.157 ± .004)
Embossment center	P1	2.0 ± 0.1 (.79 ± .004)	2.0 ± 0.1 (.79 ± .004)	4.0 ± 0.1 (.157 ± .004)
Totall tape thickness	T	0.30 ± .05 (.012 ± .002)	0.6 MAX.	0.6 MAX.
Tape width	W	12.0 ± 0.2 (.472 ± .008)	12.0 ± 0.2 (.472 ± .008)	16.0 ± 0.2 (.630 ± .008)
Reel with	W1	16.8 ± 2.0 (.661 ± .079)	16.8 ± 2.0 (.661 ± .079)	24.0 ± 2.0 (.945 ± .079)

NOTE: Devices are packed in accordance with EIA standard RS-481-A and specification given above.

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: K pcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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